

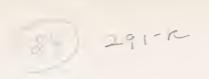
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ILLUSTRATIONS

OF

TYPICAL SPECIMENS

OF

LEPIDOPTERA HETEROCERA

IN

THE COLLECTION

 $_{
m OF}$

THE BRITISH MUSEUM.

PART I.—BY ARTHUR GARDINER BUTLER.

25968

LONDON:

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1877.





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PREFACE.

The object of this Work is to facilitate the study of Lepidoptera Heterocera by giving illustrations, accompanied by short diagnoses, of the typical specimens in the British Museum from which species have been described in other works or are described now for the first time. A strictly systematic arrangement of the species illustrated can be followed only within the limits of the several parts of the work.

The first thirteen plates of this part were executed and printed many years ago, to illustrate a catalogue of a much wider scope than that of the present work, which will account for discrepancies between names used in the plates and those adopted in the text, the nomenclature having in many instances been changed since that time. This could not be altered; but no inconvenience will be caused thereby, as in every instance an explanation is given, not only in the synonymy, but also in the index.

The descriptions of this first part have been prepared by Mr. A. G. Butler, F.L.S., one of the Senior Assistants in the Department of Zoology.

ALBERT GÜNTHER,

Keeper of the Department of Zoology.

British Museum, February 16, 1877.



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ILLUSTRATIONS

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TYPE SPECIMENS

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LEPIDOPTERA HETEROCERA.

SPHINGIDÆ.

CHÆROCAMPA, Duponchel.

Chærocampa crotonis. (Plate XV. fig. 1.)

Chærocampa crotonis, Walker, Cat. Lep. Het. viii. p. 133. n. 10 (1856).

Body and primaries sap-green: head, collar, and tegulæ margined with sordid whitish: abdomen with a central longitudinal whitish streak; a large black spot on each side of the basal segment; remaining segments dull golden at the sides, interrupted by a tapering lateral brown streak: primaries above with a black spot on lower discocellular veinlet; seven oblique dark streaks running from internal margin to apex, the first and fourth from the inside being widest and darkest: secondaries black, with a discal series of pale yellow spots. Undersurface tawny, speckled and barred with black and grey; primaries with blackish basal area. Expanse of wings 4 inches 2 lines.

Venezuela (Dyson).

DARAPSA, Walker.

Darapsa rhodocera. (Plate XV. fig. 2.)

Darapsa rhodocera, Walker, Cat. Lep. Het. viii. p. 184. n. 4 (1856).

Greyish mouse-colour, clouded with bronzy brown; the collar and outer margin of tegulæ bordered with whitish: abdomen rather pale at the sides, with a black spot on each side of the basal segment; antennæ rosy: primaries with a small pale-bordered grey spot on lower discocellular; a partially brown-edged, whitish, sericeous, oblique discal streak, beyond

which the wing is irrorated with black: secondaries black, the costal area and an elongated patch at anal angle grey; fringe whitish. Undersurface dove-colour, the disk sparsely speckled with black: primaries with a large cunciform blackish patch from the base to beyond the end of cell, leaving the median vein and a spot at the end of the cell pale; a diseal line of black dots in secondaries. Expanse of wings 3 inches 4 lines.

St. Domingo (Tweedie).

AMBULYX, Walker.

Ambulyx marginata. (Plate XV. fig. 4.)

Ambulyx marginata, Butler, Proc. Zool. Soc. p. 10. n. 21 (1875).

Body and primaries above whity brown, tinted with pink; base, two subbasal spots, an oblique transverse line, a spot near the middle, three on the costa, a quadrate one on the costa near apex, a broad external nebula, and several pale lines olive-brown: secondaries rosy; the costa, base, and abdominal area cream-coloured; onter margin broadly brown; two central dark grey lines, and a discal row of sagittate spots. Wings below yellower than above: primaries varied with ochreous; the large spot near apex present, the others wanting; transverse streaks better defined; outer border grey: secondaries pale clay-coloured; markings paler than above. Expanse of wings 4 inches 7 lines.

Rio Janeiro (Stevens).

DILUDIA, Grote.

Diludia brevimargo. (Plate XV. fig. 5.)

Diludia brevimargo, Butler, Proc. Zool. Soc. p. 12. n. 25 (1875).

Allied to *D. florestan*, but smaller; the outer margins of the wings more waved in outline; the primaries greyer, the transverse bands greener, the lines which confine them blacker and more strongly dentated; the median black bars less distinct; the apical spot narrower, indistinctly sinnated externally: secondaries with the inner transverse black band indistinct: the head and thorax greenish grey; the abdomen less red, marginal strigæ less strongly defined. Wings below darker, the bands less distinct and more irregular; the two inner bands of secondaries united. Expanse of wings 4 inches 6 lines.

Brazil (Becker).

Diludia rufescens. (Plate XV. fig. 6.)

Diludia rufescens, Butler, Proc. Zool. Soc. p. 12. n. 26 (1875).

Allied to *D. lichenea*; primaries redder; outer margin shorter, more arched; central band better defined, more dentated externally; apical patch more clongated; submarginal white streak more deeply sinuated: secondaries shorter, pale grey, with two ill-defined central pale bands: head and collar redder; abdominal lateral strigge less defined. Wings

below paler, the transverse bands less defined, only two on secondaries. Expanse of wings 5 inches 3 lines.

Rio Janeiro (Stevens).

DOLBA, Walker,

Dolba hartwegii. (Plate XV. fig. 3.)

Dolba hartwegii, Butler, Proc. Zool. Soc. p. 259. n. 55 (1875).

Primaries above smoky brown, crossed by black lines and spots; a whity brown subbasal undulated band; a white spot at end of cell: secondaries smoky brown, blackish at anal angle, pale at base, whitish on costal area near the base; a pale brown discal streak, becoming white towards anal angle, and below it a white-speckled black-centred patch. Wings below grey-brown; a pale dark-edged band from costa of primaries to anal angle of secondaries. Expanse of wings 2 inches 5 lines.

Oaxaea, Mexico (Hartweg).

CASTNIIDÆ.

CASTNIA, Fabricius.

Castnia eudesmia. (Plate I. fig. 2.)

Castnia eudesmia, G. R. Gray, Trans. Ent. Soc. ii. p. 145. n. 14 (1837); Blanchard, Gay's Chili, pl. 5. fig. 8 (1854).

Primaries greyish brown, with the fringe white; two oblique white bands; internal area whitish: secondaries black, shot with blue; the base and two discal series of large spots red, the spots with whitish pupils; outer border greyish brown. Expanse of wings 4 inches 8 lines.

Chili (Children).

Since the publication of Mr. Walker's Catalogue, a male example in fine condition has been added to the Collection; it is smaller and less brown in colour than the type.

Castnia inca. (Plate I. fig. 3.)

Castnia inca, Walker, Cat. Lep. Het. i. p. 24. n. 22 (1854).

Male.—Ferruginous, crossed obliquely from inner margin to apex by a blackish line, and varied by spots of pale ferruginous; three subapical hyaline spots, the centre one large: secondaries black, with a broad reddish-orange band and a submarginal series of orange spots. Primaries below with basal two thirds eastaneous; apical third brown, varied with testaceous spots; hyaline spots as above; outer border brown; two diseal ocelli: secondaries dull testaceous; the costa, an arched streak from costa to base of cell, a curved diseal band becoming macular towards costa and white-spotted near anal angle, and a sinuated outer border, brown. Expanse of wings 3 inches 6 lines.

Honduras (Dyson).

Castnia orestes. (Plate II. fig. 2.)

Castnia orestes, Walker, Cat. Lep. Het. i. p. 26. n. 27 (1854). Castnia umbrata, Ménétriés, Cat. Petrop. t. xi. fig. 2 (1857).

Blackish brown above, abdomen whitish: primaries irregularly banded with pale brown; a trifid subhyaline spot near the apex: secondaries with a pearly whitish pyramidal band tapering from abdominal margin, and two imperfect discal rows of searlet spots. Primaries below blue-black, brown at base and apex; bands as above, but tawny; subapical spot whiter: secondaries red-brown, white band and scarlet spots ill defined excepting at anal angle, where they cross a large black patch. Expanse of wings 2 inches II lines.

Brazil (Becker).

Castnia zerynthia. (Plate I. fig. 5.)

Castnia zerynthia, G. R. Gray, Trans. Ent. Soc. ii. p. 144. n. 11 (1837). Castnia langsdorfii, Ménétriés, Cat. Petrop. t. xi. fig. 1 (1857).

Male.—Primaries shining olive-brown, with a K-shaped, bifid, ill-defined, dirty-whitish band; two hyaline white spots near the apex: secondaries black, with the base brown; a broad central white band not reaching the costa; an anal streak and two imperfect series of spots, yellow. Expanse of wings 4 inches 10 lines.

Brazil (Children).

As usual, the measurement does not agree with that given by Mr. Gray; he made no allowance for the setting, but measured from tip to tip of the anterior wings, instead of from the central line of the prothorax.

Castnia invaria. (Plate II. fig. 4.)

Castnia invaria, Walker, Cat. Lep. Het. i. p. 23, n. 19 (1854).

Primaries blackish brown, with three hyaline white bands, two oblique, the third near apex perpendicular: secondaries red, greyish testaceous at base; four irregularly placed ovoid subapical hyaline white spots, within which is a black streak; outer border black, interrupted and narrow at its lower extremity: thorax brown, abdomen testaceous. Expanse of wings 4 inches 1 line.

Rio Janeiro (Stevens).

This species is most nearly allied to C. icarus of Cramer.

Castnia subvaria. (Plate II. fig. 1.)

Castnia subvaria, Walker, Cat. Lep. Het. i. p. 25, n. 24 (1854).

Brown above, anal tuft of abdomen slightly tawny: primaries with darker irregular transverse bands; three subhyaline subapical whitish spots: secondaries with a broad undulated outer border, tawny, becoming darker towards the margin, and intersected from apex to first median branch by a sinuated black line. Wings below shot with green and purple: primaries with basal half brown; apical half testaceous, becoming brown at apex and

CASTNIA. 5

tawny on outer margin, and interrupted by an irregular X-shaped arrangement of black bands; subapical hyaline spots well defined: secondaries nearly as above, but paler; two black spots beyond the middle. Expanse of wings 3 inches 5 lines.

Rio Janeiro (Stevens).

Most nearly allied to C. phalaris.

Castnia boisduvalii. (Plate I. fig. 4.)

Castnia boisduvalii, Walker, Cat. Lep. Het. i. p. 27. n. 28 (1854). Castnia beskei, Ménétriés, Cat. Petrop. t. xi. fig. 3 (1857).

Body dark brown, antennæ ferruginous; abdomen laterally spotted with reddish orange; anal tuft ferruginous: primaries shining purplish brown, with bronzy reflections, blackish at the base and at end of cell; a very oblique blackish discal band forking to costa from its upper third; three subapical hyaline white spots: secondaries black, with a very irregular central scarlet band, and two imperfect submarginal series of scarlet spots. Wings below brownish tawny, shading into red in parts: primaries with the apex broadly brown; hyaline spots as above; two subcostal black blotches, and three discal black spots: secondaries with a row of black discal dots; pectus sordid whitish, venter dull testaccous. Expanse of wings 3 inches.

Brazil (Becker).

Castnia dalmannii. (Plate II. fig. 3.)

Castnia dalmannii, G. R. Gray, Trans. Ent. Soc. ii. p. 145. n. 13 (1837).

Male.—Primaries olivaceous, with a narrow transverse white band, near which are two hyaline dots: secondaries deep red, with the base brown; a broad white patch from abdominal margin to subcostal nervure; a submarginal row of large black spots; nervures with black tips: head and thorax olivaceous, abdomen sordid whitish. Expanse of wings 4 inches 6 lines.

Brazil (Children).

Described as the female. The male of Mr. Gray's description is probably C. hegemon of Kollar; the additional six lines in expanse are accounted for by the setting of the type; measured from tip to tip it is just four inches and half a line, the anterior wings being thrown considerably in advance of the head.

Castnia strigata. (Plate II. fig. 5.)

Castnia strigata, Walker, Cat. Lep. Het. i. p. 30. n. 35 (1854).

Wings above dark brown, shot with dull green: primaries with a white discoidal streak; an angulated streak below it; an oblique postmedian band, its last two divisions separated by the nervures; two spots on internal area, and two near external angle, also six, placed in pairs, near the apex: secondaries with two rows of spots united at anal angle by an irregular orange

line; the spots of the inner series white, of the outer pale yellow, becoming suffused with tawny at apex: thorax blackish; abdomen brown, with whitish sides and ochreous tip. Primaries below whitish at base, without the white streaks; outer border suffused with reddish: secondaries with basal half white, external half ferruginous; spots as above. Expanse of wings 2 inches 8 lines.

Pernambuco.

Walker's description is a compound one, including the C. godartii of Ménétriés (Cat. Petrop. t. xi. fig. 4).

SYNEMON, Doubleday.

Synemon sophia. (Plate III. fig. 6.)

Hesperia sophia, White in Grey's Exped. Austral. App. p. 474. fig. 7.

Primaries brown, clouded with grey, and spotted with blackish brown; three arched series of spots on the disk, that nearest to apex pure white, the others pale grey; a white spot at end of cell: secondaries black, with a large orange spot near the base, an interrupted discal orange band, three large submarginal orange spots, and four dots of the same colour round the apical margin; body brown. Expanse of wings 1 inch 10 lines.

King George's Sound (Capt. Geo. Grey).

Synemon læta. (Plate III. fig. 4.)

Synemon læta, Walker, Cat. Lep. Het. i. p. 36. n. 4 (1854).

Primaries grey, clouded with brown; a large irregular central black spot indistinctly edged with white and bounded externally by a subcostal whitish spot, beyond which is a second black spot, followed by four whitish spots, and succeeded by a white-edged black subapical dash; two submarginal series of black dots: secondaries orange, with a black subcostal spot, a curved central black band, and an orange-spotted black border; body brown. Expanse of wings 1 inch 10 lines.

Australia.

Synemon theresa. (Plate III. fig. 5.)

Synemon theresa, E. Doubleday, Stokes's Discov. Austral. App. i. p. 517, pl. 3. fig. 6.

Primaries above brown; a white spot at end of cell; a discal series of pale grey streaks, enclosing five black spots beyond the discoidal cell; outer margin blackish, with an ill-defined submarginal grey line; fringe whity brown internally, greyish brown externally: secondaries tawny brown, a clear tawny spot at end of cell; a broad clear tawny discal band enclosing a series of black spots; margin black, fringe as in primaries. Wings below bright ochreous, with cupreous reflections; basal half greyish; outer margin black; fringe brown, with central white line: both wings with diffused ferruginous spot at end of cell, and a second better

defined beyond the cell; black discal spots nearly as above: secondaries with a white spot just beyond end of cell, and some small white spots at apex. Expanse of wings 1 inch 7 lines. New Holland.

Synemon mopsa. (Plate III. fig. 3.)

Synemon mopsa, Doubleday, Stokes's Discov. Austral. App. i. p. 518, pl. 3. fig. 7.

Primaries dark brown; three greyish white streaks at base of internal half; a white spot at end of cell; a waved discal series of elliptical whitish spots with blackish centres: secondaries fulvous, greyish at base, with three or four greyish brown spots on the disk (or dark coppery brown, with a spot at end of cell and the disk castaneous; discal spots dark brown). Wings below light or dark brown, with paler markings: primaries cupreous tinted, with a round spot, marked out by a broad ochraceous zone, beyond the end of the cell; a subapical series of blackish discal spots, bounded by a submarginal series of white spots. Expanse of wings 1 inch $2\frac{1}{2}$ lines.

South Australia.

Synemon plana. (Plate III. fig. 7.)

Synemon plana, Walker, Cat. Lep. Het. i. p. 37. n. 5 (1854).

Body above pale brown: primaries sordid white, irrorated with dark brown, with black costal and outer borders; a discal series of blackish white-edged spots: secondaries chrome-yellow, outer border black-brown, fringe white-varied; four or five black discal spots. Body below white; the wings white, each with black and yellow margins, black-edged white fringe, and three or four black spots on the disk. Expanse of wings 1 inch 3-4½ lines.

Australia.

AGARISTIDÆ.

AGARISTA, Leach.

Agarista lewinii. (Plate IV. fig. 2.)

Agarista lewinii, Boisduval, Voy. de l'Astrolabe, i. Lép. p. 176. n. 6.

Primaries purplish black; four spots on basal area, an angulated band beyond the middle, a subapical decreasing discal series of dots, and a submarginal series of elongate dots sulphuryellow: secondaries purplish brown; costal area paler, sericeous; a squamose yellow spot beyond end of cell: body black-brown, thorax yellow-varied, anal tuft ochrous. Wings below with fewer spots than above; body banded with orange. Expanse of wings 1 inch 10 lines to 2 inches 2 lines.

Australia.

Agarista ephyra. (Plate IV. fig. 4.)

Agarista ephyra, Walker, Cat. Lep. Het. i. p. 42. n. 6 (1854).

Smaller than the preceding; primaries with five spots on the basal area; postmedian band not so strongly angulated; spot on secondaries large and distinct. Expanse of wings 1 inch 7-9 lines.

Tasmania.

Agarista affinis. (Plate IV. fig. 3.)

Agarista affinis, Boisduval, Voy. de l'Astrolabe, i. Lép. p. 177. n. 8.

Black-brown; primaries with basal half yellow-speekled; a more or less interrupted oblique postmedian band; a bisinuated discal series of minute white dots; yellow spots on the fringe at apex and external angle; secondaries with the fringe yellow-spotted; body blackish; head and thorax varied with whitish; abdomen with whitish edges to the segments; anal tuft fulvous. Legs below varied with fulvous; primaries without the basal yellow speekling or white discal dots; secondaries with a dot at end of cell and a discal series grey. Expanse of wings 1 inch 5 lines.

Australia.

Agarista novæ-hiberniæ. (Plate IV. fig. 5.)

Agarista novæ-hiberniæ, Boisduval, Voy. de l'Astrolabe, i. Lép. p. 128. n. 10.

Primaries above black; the base of the costa and the discoidal cell spotted with pale blue; internal area transversely streaked with pale creamy yellow; an irregular, externally tridentate, pale yellow, postmedian band; a discal series of pale blue dots: secondaries with the basal half greenish grey, external half black-brown; fringe spotted with white: head and thorax black, spotted with pale yellow; abdomen grey; anal tuft fulvous, with black dorsal spot. Primaries below without internal transverse streaks, discoidal blue spots united into a patch; postmedian band white; no discal dots; fringe white at apex and external angle, as above: secondaries white, with a greenish tinge; a transverse black spot closing the cell; a broad external black band, crossed by a series of blue spots; pectus white, venter fulvous. Expanse of wings 1 inch 7 lines.

Australia.

Agarista leonora. (Plate IV, fig. 6.)

Agarista leonora, Doubleday, Stokes's Discov. Austral. App. i. p. 518.

Wings black: primaries streaked with pale blue; a transverse oblique spot just beyond the middle of the cell, a trifid spot beyond it, and four discal spots (the third elongated, large, on first median interspace) pale yellow; four blaish discal spots in pairs beyond the yellow spots: secondaries greyish at base; costal area cupreous; a discounal macular pale

yellow streak; fringe spotted with white. Head and thorax black, varied with yellow; abdomen bluish, with orange anal tuft. Wings below shining black, spotted here and there with blue: primaries with a discoidal spot as above, and an irregular macular postmedian band, pale yellow; internal area brown: secondaries with the yellow streak broader than above. Body below dark brown; palpi and collar pale yellow; coxæ and femora clothed with orange hair; tibiæ and tarsi spotted with pale yellow; abdomen with whitish edges to the segments; anal tuft orange. Expanse of wings 1 inch 11 lines.

Australia.

Agarista donovani. (Plate IV. fig. 7.)

Agarista donovani, Boisduval, Voy. de l'Astrolabe, i. Lép. p. 176. n. 7.

Wings above black-brown, with a blue shot: primaries with two spots in the cell, and three bifid diseal spots in the form of a triangle, sulphur-yellow; a subapical bifid or trifid grey spot; apex white, fringe white-spotted: secondaries crossed by an irregular sulphur-yellow band, fringe white-spotted. Body black; head, collar, and tegulæ varied with yellow; abdomen banded with yellow; anus clothed with black and fulvous hairs. Wings below almost as above: pectus brown; legs with orange hairs, tibiæ and tarsi white-spotted; venter creamy whitish, terminal segments orange. Expanse of wings 1 inch 11 lines to 2 inches 2 lines.

Australia.

Agarista milete. (Plate V. fig. 6.)

Phalæna-noetua milete, Cramer, Pap. Evot. i. pl. xviii. fig. D (1779). Eusemia milete, Moore, Cat. Lep. E. I. C. p. 290. n. 666 (1858). Eusemia melite (sic), Walker, Cat. Lep. Het. i. p. 53. n. 14 (1854).

Black; head white-spotted; collar orange, thorax spotted with pale yellow; tegulæ fringed with grey; abdomen with the basal segments white-edged, the anal segments yellow-edged; anal tuft orange. Wings spotted here and there with metallic steel-colour; two irregularly arched series of pale yellow spots; primaries with a spot of the same colour near the end of the cell; fringe of secondaries white. Expanse of wings 1 inch 8 lines to 2 inches 2 lines.

Java (Horsfield).

This species is decidedly allied to A. leonora and A. donovani, and therefore cannot be retained in the genus Eusemia; the two genera are, however, very similar in structure, and can be best distinguished by external facies. Dr. Boisduval considers them identical (and 1 am inclined to agree with him), although they have a very different aspect.

EUSEMIA, Dalman.

Eusemia basalis. (Plate V. fig. 2.)

Eusemia basalis, Walker, Cat. Lep. Het. i. p. 53. n. 12 (1854).

Black-brown; abdomen banded with orange; primaries spotted with steel-blue; a large

spot near the base, a small costal spot, and a band across the middle pale yellow: secondaries with a central pale yellow spot; a large fulvous abdominal patch near the base. Wings below nearly as above. Expanse of wings 2 inches 3 lines.

Bengal.

Eusemia proxima. (Plate IV. fig. 9.)

Eusemia proxima, Walker, Cat. Lep. Het. i. p. 50. n. 6 (1854).

Primaries black-brown, a basicostal orange line; an oblique central pale yellow band, and a transverse litura of the same colour beyond the end of the cell: secondaries black-brown, with a very broad central tawny band crossed by a brown streak. Head, thorax, base of abdomen, and a broad subanal tuft black-brown; centre of abdomen, anal tuft, shoulders, crest, and collar tawny: wings below shot with deep blue, otherwise as above. Expanse of wings 2 inches 4 to 7 lines.

Assam.

Eusemia longipennis. (Plate V. fig. 5.)

Eusemia longipennis, Walker, Cat. Lep. Het. i. p. 51. n. 9 (1854).

Primaries black-brown, speekled with grey at the base; a small spot towards the base of the cell, a large pyriform spot on inner margin, two large central spots placed obliquely, a spot near external angle, and an oblique subapical series of five elongated spots towards apex deep ochreous: secondaries red (probably carmine in fresh examples), with the base, apex, and a broad external border black; apex of both wings fringed with white. Head and thorax black, spotted with white; abdomen brown, anal segments dull black: wings below rather paler than above. Expanse of wings 3 inches 6 to 11 lines.

Ashanti.

Eusemia pallida. (Plate V. fig. 3.)

Eusemia pallida, Walker, Cat. Lep. Het. i. p. 52. n. 10 (1854).

Nearly allied to the preceding species, but smaller; the primaries shorter and more rounded at apex; the secondaries ochreous, with a much narrower black onter border. Abdomen brown, banded with ochreous. Expanse of wings 3 inches.

Hab. —?

This and the following are doubtless African species.

Eusemia contigua. (Plate IV. fig. 8.)

Eusemia contigua, Walker, Cat. Lep. Het. i. p. 50. n. 7 (1854).

Primaries black-brown, streaked with plumbagineous; a large oblique spot near the base, cut by the median nervare, a spot near the end of the cell, and an irregular postmedian band ochraceous; apex white: secondaries red, with a black-brown border; fringe varied with

whitish. Head and thorax black-brown, spotted with white; abdomen shining brown, banded with testaceous. Expanse of wings 2 inches I line.

Hab. —?

BURGENA, Walker.

Burgena varia. (Plate IV. fig. I.)

Damias varia, Walker, Cat. Lep. Het. i. p. 15, n. 4 (1854).

Black; head and palpi streaked with white; collar and margins of tegulæ testaceous; abdomen banded with ochreous: primaries with an clongated ochreous spot near the base; three central white spots in the form of a triangle: secondaries crossed by an irregular narrow orange band. Expanse of wings 1 inch 8 to 11 lines.

Australia, Richmond river.

B. varia, B. transducta, and B. educta chiefly differ in the width of the orange band of secondaries.

ÆGOCERA, Latreille.

Ægocera bimacula. (Plate V. fig. 4.)

Ægocera bimacula, Walker, Cat. Lep. Het, i. p. 57, n. 5 (1854).

Primaries chocolate-brown, irrorated with grey; a large cuneiform patch, with its apex at the base of the wing (interrupted in front by two blackish spots, and behind by one, with plumbagineous centres) and an oblique band beyond the middle pale yellow; a very irregular purplish red band partially enclosing the yellow markings; outer border purplish red, edged with ochreous; fringe brown internally, whitish externally: secondaries orange, with two large central rounded black spots; a broad submarginal irregular dark brown band; a slender deep red marginal line. Head and thorax chocolate-brown, varied with pale yellow; abdomen orange, spotted with black. Wings below paler than above; costa of primaries ochraceous, the same colour replacing the pale yellow markings. Expanse of wings 2 inches.

North India.

Ægocera latreillii. (Plate V. fig. 8.)

Ægocera latreillii, Herrich-Schäffer, Aussl. Schmett. i. pl. 5, fig. 19. Ægocera magna, Walker, Cat. Lep. Het. i. p. 56, n. 3 (1854).

Primaries reddish chocolate, sparsely irrorated with grey; costa and inner margin black-brown; a spot in the cell, a macular interno-median longitudinal streak, and a postmedian band pale yellow; several plumbagineous lines between the yellow markings; outer margin narrowly dark brown; fringe ochreous: secondaries orange, with a large spot at the end of the cell, and a rather broad submarginal dark brown border. Thorax reddish chocolate, varied with pale yellow: abdomen orange. Wings below paler; primaries with the margins and markings ochreous. Expanse of wings 1 inch 11 lines to 2 inches 1 line.

Sierra Leone (Foxeroft & Morgan).

Ægocera fervida. (Plate V. fig. I.)

Ægocera fervida, Walker, Cat. Lep. Het. i. p. 57. n. 4 (1854).

Primaries lighter or darker purplish brown, irrorated with grey; costal margin and fringe cream-colour; an interno-median longitudinal band and an oblique transverse post-median band eream-colour: secondaries orange, a black or red-brown clongate spot on the discoccllular nervures, and a broad slightly irregular marginal border of the same colour; fringe ochreous. Head and thorax black-brown, with a central longitudinal cream-coloured streak; abdomen orange, with a dorsal row of black spots; below paler; base, costa, and bands of primaries ochreous: secondaries with the outer border ferruginous, becoming darker at anal angle. Pectus ochreous; venter white, with lateral black dots. Expanse of wings 1 inch 10 lines to 2 inches 2 lines.

Natal (Gueinzius), South Africa (Sir A. Smith).

The reddish-bordered form is simply a variety occurring with the typical form at Natal.

METAGARISTA, Walker.

Metagarista triphænoides. (Plate V. fig. 7.)

Metagarista triphænoides, Walker, Cat. Lep. Het. i. p. 61. n. 1 (1854).

Primaries pale brown, the base of costa and internal half of wing sprinkled with black scales; two or three black liture across the basal half of the discoidal cell, two transverse grey-centred clongate black spots with black-edged pale zones, one beyond the middle, the other at the end of the cell; two parallel waved discal lines, the nervures, and the internervular folds black; margin and fringe black, traversed by an undulated pale yellow line: secondaries orange, with an interrupted black external border. Thorax pale brown; abdomen ochreous, banded with black. Wings below ochreous; a diffused submarginal brown streak: primaries with a black spot in the cell and a second at the end of it. Body ochreous, venter whitish. Expanse of wings 2 inches 6 lines.

Ashanti.

We have a second smaller specimen in the Museum from Cape Coast. *Phægorista leucomela* of Herrich-Schäffer is a distinct but allied species.

ZYGÆNIDÆ.

ANTERIS, Wallengren.

Anteris ampla. (Plate VI. fig. 12.)

Zygæna ampla, Walker, Cat. Lep. Het. i. p. 101. n. 59 (1854).

Primaries dark brown, with five eream-coloured spots—one at the base, the other four arranged in pairs across the middle and near the apex of the wing: secondaries ochrous, the

apex and outer margin black; a subapical ochreous spot connected internally with the ground-colour; a lunate black costal marking. Head and thorax black, white-spotted; abdomen carmine, banded with black; antennæ black, with a white spot at the base of the club. Wings below nearly as above, but the spots of primaries yellower. Body below black. Expanse of wings 1 inch 6 lines.

Natal.

NORTHIA, Walker.

Northia cyanecula. (Plate VII. fig. 8.)

Nov. gen. eyanecula, Herrich-Schäffer, Aussl. Schmett. i. fig. 224. Glaucopis (Northia) nigrigemma, Walker, Cat. Lep. Het. i. p. 141. n. 1 (1854).

Primaries hyaline white; base, internal area, margins, veins, and a spot on discocellulars purplish brown: secondaries purplish brown, with a hyaline spot, crossed by brown nervures, on the disk. Body black-brown; crest, collar, and tegulæ spotted with glittering metallic green; antennæ metallic blue or green; anal segments crossed by green or cupreous bands; anus with a pale ochraceous tuft. Body black-brown below; the coxæ and sides of abdomen green. Expanse of wings 1 inch 7 lines.

North China: Hong-kong (Bowring).

PROCRIS, Fabricius.

Procris trimacula. (Plate VI. fig. 8.)

Procris trimacula, Walker, Cat. Lep. Het. i. p. 110. n. 12 (1854).

Wings dark brown: primaries with three sordid testaceous spots, two across the middle and one subapical. Head, antennæ, and thorax black; collar, tegulæ, and abdomen fiery metallic copper-colour; anal tuft ochraceous. Wings below dark brown, with a subcostal metallic green streak. Expanse of wings 9 lines.

Sydney (Lambert).

Procris tricolor. (Plate VI. fig. 6.)

Procris tricolor, Walker, Cat. Lep. Het. i. p. 111. n. 13 (1854).

Wings smoky brown, semitransparent. Body black; collar crimson; base of abdomen banded with cream-colour, subterminal segment with a border of the same colour, remaining segments with lateral cream-coloured dots; venter, with the base and the margins of all the segments, cream-coloured. Expanse of wings 9 lines to 1 inch.

Tasmania and Australia.

Procris stipata. (Plate VII. fig. 9.)

Procris stipata, Walker, Cat. Lep. Het. i. p. 114. n. 19 (1854).

Wings black-brown, with a white fringe, sordid in the centre: primaries with two golden-

green metallic streaks at the base, four white spots in pairs: secondaries with a white streak near the base and a white spot at the end of the cell. Body black-brown. Head, collar, and tegulæ golden green; pectus golden green. Expanse of wings $10\frac{1}{2}$ lines.

North India.

Procris dolens. (Plate VI. fig. 4.)

Procris dolens, Walker, Cat. Lep. Het. i. p. 112. n. 16 (1854).

Entirely smoky brown, with a slight purplish tinge; the costa of primaries, base of secondaries, and abdomen sometimes slightly tinted with green; in the type the primaries are shot with dark green from near the base to the outer margin. Expanse of wings $6\frac{1}{2}$ to $8\frac{1}{2}$ lines.

Tasmania.

Procris? pusilla. (Plate VI. fig. 1.)

Procris pusilla, Walker, Cat. Lep. Het. i. p. 112. n. 15 (1854).

Wings semitransparent smoky brown; secondaries slightly iridescent. Body black; abdomen with dark green reflections, with a more or less defined lateral marginal line; legs brown. Expanse of wings 7 lines.

Venezuela (Dyson).

A very narrow-winged species, possibly generically distinct, but the type is much worn.

Procris apicalis. (Plate VI. fig. 2.)

Proeris apicalis, Walker, Cat. Lep. Het. i. p. 111. n. 14 (1854).

Primaries bright metallie green; secondaries dark smoky brown. Body smoky brown, more or less sprinkled with metallic green scales; antennæ metallic green; anal tuft orange. Wings below paler smoky brown, with broad green borders; fringe brown. Expanse of wings 8 to 9 lines.

Australia, Sydney.

Walker's var. β is a very distinct species; the specimens enumerated from Tasmania are also distinct.

POLLANISUS, Walker.

Pollanisus sequens. (Plate VI. fig. 3.)

Pollanisus sequens, Walker, Cat. Lep. Het. i. p. 115. n. 2 (1854).

Primaries bright metallic green, fringe brown; secondaries smoky brown, fringe paler: thorax and shank of antennæ green, pectinations of antennæ brown. Abdomen green or eupreous. Wings below brown, with a green subcostal streak. Expanse of wings 9 to 10 lines.

Tasmania.

Pollanisus? rufiventris. (Plate VI. fig. 7.)

Procris rufiventris, Walker, Cat. Lep. Het. i. p. 110. n. 11 (1854).

Wings purplish brown. Head, thorax, base of abdomen, and anus black; remaining segments of abdomen reddish orange. Expanse of wings 7 to 9 lines.

Swan river, Australia.

I am rather doubtful as to whether this should not form the type of a new genus, the pectinations of the antennæ in the male being shorter than in the other species.

Mr. Walker gives 4 lines as the measurement of the wings; but this must be a misprint, for the smallest example in the Museum, when measured from tip to tip of the primaries, expands 6 lines.

Pollanisus cupreus. (Plate VI, fig. 5.)

Pollanisus cupreus, Walker, Cat. Lep. Het. i. p. 115. n. 3 (1854).

Primaries metallic copper-colour, the apical area purplish brown; secondaries dark brown. Head and thorax bright copper-colour; antennæ black; abdomen blackish. Wings below purplish brown, fringe paler; peetus and frons cupreous. Expanse of wings 10 to 11 lines.

West Australia (Clifton), Swau river (Richardson).

NEUROSYMPLOCA, Wallengren.

Neurosymploca contraria. (Plate VII. fig. 4.)

Zygæna contraria, Walker, Cat. Lep. Het. i. p. 113. n. 18 (1854).

Primaries semitransparent brown, with six small orange spots placed obliquely in pairs—the first pair at the base connected by a pale testaceons patch; the second pair in the middle, also connected by a pale band; the third pair subapical, not connected: secondaries crimson, with a very irregular black border. Body black, with an orange spot on each shoulder. Expanse of wings 11 to 14 lines.

Natal (Gueinzius).

A second example of this species was placed by Mr. Walker among the specimens referred to Zygæna concinna, which unfortunate error has caused much confusion. Walker's description of the body in Z. concinna is taken from an example of Z. hottentotta.

SYNTOMIS, Ochsenheimer.

Syntomis nostalis. (Plate VI. fig. 11.)

- Syntomis nostalis, Walker, Cat. Lep. Het. i. p. 129. n. 28 (1854).
- 2. Syntomis simplex, Walker, l. c. n. 27 (1854).

Blue-black; primaries with five white hyaline dots, one at the base, two in the middle, and two before apex: secondaries with a small white spot on interno-median area near the

base. Abdomen with an orange spot at the base and a row of orange dots along each side. Expanse of wings 1 inch to 1 inch 3 lines.

Natal.

Syntomis kuhlweinii. (Plate VI. fig. 17.)

Syntomis khulweinii, Lefebvre, Mag. de Zool. Class. ix. pl. 23 (1832). Syntomis simplex (pt.), Walker, Cat. Lep. Het, i. p. 129. n. 27 (1854).

Dark shining green; primaries with six hyaline white spots, one near the base, two in the middle, three before the apex; secondaries with two spots, one on interno-median area near the base, the other between the median branches; abdomen with a scarlet spot at the base and a row of scarlet dots on each side. Expanse of wings 1 inch 1 to 4 lines.

Natal.

This species and the females of *S. nostalis* were formerly confounded together; consequently Mr. Walker's description of *S. simplex* is a compound one, in part corresponding to each species. The colour is that of *S. nostalis*, as also the description of the hind wings and body; but the front wings are described from an example of *S. kuhlweinii*.

Syntomis marginalis. (Plate VI. fig. 13.)

Syntomis marginalis, Walker, Cat. Lep. Het. i. p. 130. n. 30 (1854).

Wings dark green; primaries with two transparent white spots in the middle, and two at second third of wing, the lower one bifid; secondaries with a small spot on interno-median area near the base, a second larger one in the cell, and two unequal small ones on the median interspaces. Head black, from ochreous; collar black, with an orange spot on each side; thorax dark green; an orange spot on each tegnla. Abdomen dark green, with lateral segmental orange fasciæ; pectus dark green; legs streaked with ochreous; venter bronzy, with a large central oval orange spot on each segment. Expanse of wings 20 lines.

Ashanti.

Syntomis divisa. (Plate VI. fig. 14.)

Syntomis divisa, Walker, Cat. Lep. Het. i. p. 131, n. 31 (1854).

Wings transparent white, the margins and veins black; primaries with the base black, with a yellow basal spot; an interno-median transverse band; a bar from the end of the cell to the onter margin, and a cunciform spot on the margin near external angle, black: secondaries with a black subquadrate spot, continuous with the outer border, against the first median branch. Head black, frons white; thorax dark green, a large spot on each shoulder and two small spots on each side of metathorax orange. Abdomen dark green, banded with orange. Body below bronzy brown; front coxe sordid white, remaining coxe ochreous; femora below and base of tarsi white; venter broadly banded with sordid white. Expanse of wings 20 lines.

Silhet.

SYNTOMIS. 17

Syntomis melas. (Plate VI. fig. 10.)

Syntomis melas, Walker, Cat. Lep. Het. i. p. 133. n. 36 (1854).

Wings transparent white; margins and veins brown: primaries with the apical and external angles with broad sinuated borders; a large spot of brown at the end of the cell. Body purplish brown; frons, two spots on the collar, tegulæ, two longitudinal patches on the mesothorax, two dots on the metathorax, six more or less interrupted bands on the abdomen, the coxæ, spots on the trochanters, and five broad ventral bands cream-colour. Expanse of wings 2 inches 4 lines.

Nepal (Hardwicke).

Syntomis fulvescens. (Plate VII. fig. 2.)

Syntomis fulvescens, Walker, Cat. Lep. Het. i. p. 132. n. 34 (1854). Var. Naclia thyretiformis, Wallengren, Wien. ent. Mon. iv. p. 40. Ceryx thyretiformis, Wallengren, l. c. vii. p. 140.

Wings dark brown: primaries with a broad transverse band before the middle, cut by the median vein, and two large bifid spots halfway between the band and the apex transparent white: secondaries with a transparent submedian fascia. Body dark brown, hairy; crest, tegulæ, two spots on metathorax, and three parallel longitudinal abdominal bands ochreous; anus clothed with whitish hairs. Expanse of wings 1 inch.

Congo (Richardson) and South Africa.

Syntomis pectoralis. (Plate VI. fig. 15.)

Syntomis peetoralis, Walker, Cat. Lep. Het. i. p. 133. n. 35 (1854).

Wings transparent white, the veins and margins dark brown: primaries with a band from costa, across the discoccllulars, to second median branch, where it unites with a large subconical patch at external angle; a broad apical patch and a bar through the discoidal interspace dark brown. Head and thorax black; from and shoulders white; metathorax and base of abdomen earmine; remainder of abdomen dark green, pectus dark brown; coxæ earmine; venter variable greenish brown. Expanse of wings 1 inch 4 lines.

Moulmein (Clerck) and Cambodia.

Syntomis terminalis. (Plate VII. fig. 1.)

Syntomis terminalis (pt.), Walker, Cat. Lep. Het. i. p. 130. n. 29 (1854).

Wings transparent white, the veins and margins dark brown: primaries with the apical area, discoidal interspace, and an irregular transverse band across the end of the cell, from costa to external angle, black-brown: secondaries with the external third black-brown. Head and thorax dark green; abdomen bronzy brown; anus tawny; coxæ and lateral series of ventral spots white. Expanse of wings 1 inch $4\frac{1}{2}$ lines.

Africa?

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Syntomis constricta, n. sp. (Plate VII. fig. 6.)

Syntomis terminalis (pt.), Walker, Cat. Lep. Het. i. p. 130. n. 29 (1854).

Abdomen more slender and more constricted than that of the preceding species, with a transverse white band at the base: wings paler*; the transverse band of primaries broader; the npper hyaline spot, left between the band and apex, simple instead of bifid; lower bifid hyaline spot considerably smaller. Expanse of wings I inch 3 lines.

Congo (Richardson).

Syntomis albimacula. (Plate VI. fig. 9.)

Syntomis albimacula, Walker, Cat. Lep. Het. i. p. 128. n. 26 (1854).

Nearly allied to S. terminalis; wings shorter; the discal hyaline spots very much smaller, the upper one simple; secondaries smaller, apical half purplish brown. Body dark green; a white dot on the crest; abdomen with a transverse white band at the base and another just beyond the middle; anus purplish above, tawny below; coxæ and two ventral bands white. Expanse of wings I inch 2 lines.

Sierra Leone (Morgan).

Syntomis fervida. (Plate VI. fig. 16.)

Syntomis fervida, Walker, Cat. Lep. Het. i. p. 131. n. 31 (1854).

Wings yellowish hyaline, margins black-brown: primaries with the veins, apex, a spot on the margin at apex of first median interspace, and a spot on lower discoccillular, black; a costal streak and the submedian nervure ochreous. Body bright ochreous; the crest, three longitudinal lines on the thorax, outer fringe of tegulæ, sides of metathoracic glandular drums, five narrow abdominal bands, the anus, and the legs in part, blackish. Expanse of wings 1 inch 4 lines.

Moulmein (Clerck).

MELISA, Walker.

Melisa connexa. (Plate VIII. fig. 1.)

Euchromia (Aclytia) connexa, Walker, Cat. Lep. Het. i. p. 246, n. 80 (1854).

Primaries purplish brown; a hyaline-white quadrate spot within the end of the cell; secondaries hyaline white, the veins and borders dark brown. Body black; head with a blue spot on the vertex; collar, base of tegulæ, and sides of abdomen orange; metathorax with two blue spots; peetus dark brown, spotted with blue; trochanters orange; venter orange, with an interrupted black lateral line. Expanse of wings 1 inch 4 lines.

West Africa.

^{*} This is very possibly due to fading.

Melisa diptera. (Plate IX. fig. 10.)

Euchromia (Melisa) diptera, Walker, Cat. Lep. Het. i. p. 265. n. 114 (1854).

Wings black, with purple reflections; the secondaries very small. Body black; abdomen with lateral series of ochreous dots; anus castaneous; pectus black; femora, tibiæ, and tarsi reddish orange; venter with the basal half reddish orange, anal half ochreous. Expanse of wings 2 inches 1 line.

Congo (Richardson).

HYDRUSA, Walker.

Hydrusa bicolor. (Plate IX. fig. 1.)

Euchromia (Hydrusa) bicolor, Walker, Cat. Lep. Het. i. p. 255. n. 96 (1854).

Wings black. Body black; the head, collar, and seven broad transverse abdominal bands orange. Expanse of wings 1 inch 3 lines.

Australia.

Hydrusa multigutta. (Plate VII. fig. 3.)

Syntomis multigutta, Walker, Cat. Lep. Het. i. p. 134. n. 37 (1854).

Wings yellowish hyaline, margins and veins black-brown: primaries with a discocellular litura and the apex brown: secondaries with rather a wide outer border. Head and thorax black; outer margin of tegulæ carmine: abdomen carmine, with three rows of oblong spots and the anus black; pectus dark brown, trochanters carmine; venter carmine, with two rows of oblong black spots. Expanse of wings 1 inch.

Nepal (Hardwicke).

The type is faded, consequently the abdomen is described as "reddish luteous;" but we now have a fresh example from Darjeeling, and a second marked "India," in both of which the abdomen is bright carmine.

THYRASSIA, Butler.

Thyrassia subcordata. (Plate VII. fig. 5.)

Syntomis subcordata, Walker, Cat. Lep. Het. i. p. 132. n. 33 (1854).

Brownish black: primaries with three luteous hyaline spots, two forming a postmedian transverse band, the third subapical: secondaries with a large ochreons spot at the base: abdomen with a broad central ochreons band, interrupted by one or sometimes two blackedged segments and a slender longitudinal dorsal line. From and collar ochreons; venter black. Expanse of wings 10 to 12 lines.

North India.

TASCIA, Walker.

Tascia pulchra. (Plate X. fig. 3.)

Euchromia (Aclytia) finalis (pt.), Walker, Cat. Lep. Het. i. p. 245. n. 77 (1854).

Dull dark brown: primaries with a quadrifid postmedian hyaline spot: secondaries hyaline white at base, median area bright metallic blue: erest, apex of antennæ, back of the eyes, and collar, metallic steel-blue; second and third segments laterally metallic green, below which all the segments have a line of earmine; from and pectus spotted with steel-blue. Primaries below with a dash of metallic blue in the cell: secondaries with basicostal area and a subcostal spot metallic green; the hyaline area edged with blue; anal angle greenish; otherwise as above. Expanse of wings I inch I line.

Congo (Curror).

The type of *T. finalis* of Walker is from Natal, and is identical with his *T. chrysotelus* (Lep. Het. vii. p. 1600. n. 1).

PHACUSA, Walker.

Phacusa tenebrosa. (Plate XII. fig. 1.)

Glaucopis (Phacusa) tenebrosa, Walker, Cat. Lep. Het. i. p. 150, n. 16 (1854). Syntomis tenebrosa, Walker, l. c. vii. p. 1592 (1856).

Wings hyaline white; the veins, margins, bases, apiees, and a band before apex in both wings black; two gold spots at base of primaries: head and thorax black; the collar, centre of metathorax, and abdomen golden: abdomen banded with black, anal segment purplish black: secondaries with a pyriform subcostal embossed testaceous spot. Body below black; venter banded with gold; anus purplish. Expanse of wings 1 inch 4 lines.

North India.

PHAUDA, Walker.

Phauda flammans. (Plate IX. fig. 2.)

Euchromia (Phauda) flammans, Walker, Cat. Lep. Het. i. p. 257. n. 98 (1854).

Primaries dull deep red, with a large oval external black marginal patch: secondaries subhyaline blackish, with the costa red: head and thorax dull deep red: abdomen brown, densely clothed with long hair, red at the sides, and with two long terminal tufts of black hair. Wings below brighter than above. Body, excepting the base of venter, terminal tufts, the proximal half of femora, the tibie, and tarsi bright searlet. Expanse of wings 14 lines.

North India.

Phauda fortunii. (Plate IX, fig. 3.)

Nov. gen. fortunii, Herrich-Schäffer, Aussl. Schmett. i. fig. 223. Euchromia (Phauda) triadum, Walker, Cat. Lep. Het. i. p. 257. n. 99 (1854).

Wings semitransparent red, with broad apical black patches: primaries usually with the

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apex white. Head, thorax, and sides of abdomen red; centre of abdomen and several lateral tufts on the last segments black; several radiating brown-tipped terminal black tufts of long hairs. Body below, excepting the last two or three segments of venter and the tibic and tarsi, red; the end of the venter clothed with whitish bairs. Expanse of wings 1 inch 6 to 8 lines.

North China (Cuming).

The "bare shining spot" on the head, mentioned in Mr. Walker's description, is due to abrasion.

HISTICA, Walker.

Histica bellatrix. (Plate VIII, fig. 8.)

Euchromia (Histica) bellatrix, Walker, Cat. Lep. Het. i. p. 217. n. 20 (1854).

Primaries dark brown; a subcostal streak to beyond the end of the cell; an internomedian curved longitudinal streak to near external angle, and a slender abbreviated internal line all carmine; a subquadrate spot in the cell and an oblique irregular narrow postmedian band ochreous; two metallic-blue dots on the discocellulars and two at the base: secondaries black-brown; a yellow patch on the abdominal margin, continued as a broad irregular angulated diseal carmine band to the costal nervure. Head and thorax black-brown; from and collar spotted with metallic blue; the tegulæ bright ochreous; abdomen brown, basal segments yellow, remaining segments with lateral metallic-blue dots. Primaries below with the interno-median streak considerably widened: secondaries with the outer half of the diseal band pale orange; a blue spot at the end of the cell; otherwise as above. Pectus and legs black-brown, trochanters of front pair of legs ochreous; venter ochreous, the last two segments dark brown with lateral blue dots. Expanse of wings 2 inches 6 lines.

Venezuela (Dyson).

Histica amazonica. (Plate XVIII. fig. 1.)

Histicea amazonica, Butler, Journ. Linn. Soc., Zool. vol. xii. p. 362. n. 5 (1876).

Allied to the preceding, but darker; the primaries with more slender carmine streaks, postmedian oblique band broader, darker, and not irregular: secondaries with a narrow trifid oblique postmedian carmine fascia (no other markings). Body black-brown; head, collar, and sides of abdomen spotted with metallic blue. Wings below with similar differences to those of the preceding species. Expanse of wings 2 inches 5 to 10 lines.

Ega and Villa Nova (Bates), East Peru (Degand).

Histica uranophila. (Plate XVIII. fig. 2.)

Eucyane uranophila, Walker, Cat. Lep. Het. Suppl. v. p. 1874 (1866).

Primaries black-brown; a subcostal metallic-green streak; a green discoccillular litura; two oblique green-edged hyaline white bands, interrupted by black veins, at first and second

thirds of the wing: secondaries hyaline white, with a broad black-brown outer border; costal area pale greyish brown; the veins and the borders of the hyaline area metallie green. Head and thorax black-brown; the head, collar, and tegulæ spotted with metallie green; abdomen greyish brown with greenish reflections; a dorsal metallie-green stripe, and green and whitish lateral stripes: coxæ and trochanters of first pair of legs white; tibiæ with a green stripe; venter sordid white. Expanse of wings 2 inches 3 lines.

St. Paulo (Bates).

EUCHROMIA, Hübner.

Euchromia leonis. (Plate X. fig. 2.)

Euchromia leonis, Butler, Journ. Linn. Soc., Zool. vol. xii. p. 363. n. 4 (1876). Euchromia (Hira) interstans, var. β, Walker, Cat. Lep. Het. i. p. 221. n. 28 (1854).

Smaller and more brightly coloured than *E. interstans*; the metallic spots all brilliant green, the yellow wing-spots more golden in tint: primaries with the basal yellow patch larger and more oblique; postmedian quadrifid band rather narrower; basal yellow spot of secondaries more distinct. Expanse of wings 1 inch 9 lines.

Sierra Leone (Foxcroft & Morgan).

Euchromia semiluna. (Plate IX. fig. 8.)

Euchromia (Fregella) semiluna, Walker, Cat. Lep. Het. i. p. 272. n. 127 (1854).

Wings black-brown: primaries with a creamy ochraceous spot at the base of the costa; a semicircular band across the base, a nearly straight band across the middle, and an oblique subapical band orange: secondaries with the basal half of costal area and cell pale yellow; base of interno-median area carmine; two rounded orange spots just beyond the end of the cell. Body black; head, collar, margin of tegulæ, metathorax, anal segments, and pectus carmine; segments of the abdomen with posterior blue edges; collar spotted with lilac. Expanse of wings 1 inch 10 lines.

Hab. ---?

EURATA, Herrich-Schäffer.

Eurata picta. (Plate XI. fig. 14.)

Eurata pieta, Herrich-Schäffer, Aussl. Schmett. i. fig. 52. Eurota (sic) pictula, Walker, Cat. Lep. Het. i. p. 181. n. 72 (1854).

Wings black: primaries with the base yellow; a central bifid hyaline white band, and a second irregular hyaline band from subcostal nervure to outer margin, separated by the black nervures into five parts: secondaries with a trifid hyaline spot beyond the cell; base carmine. Body black; collar ochreous; abdomen broadly banded with creamy yellow, with the basal segments carmine at the sides; coxæ red. Expanse of wings 1 inch 5 lines.

Venezuela (Becker).

SYNTOMEIDA, Harris.

Syntomeida ferox. (Plate X. fig. 7.)

Glaucopis euterpe, Herrich-Schäffer, Aussl. Schmett. fig. 430. Euchromia (Hippola) ferox, Walker, Cat. Lep. Het. i. p. 223. n. 31 (1854).

Primaries dark bronzy green, bluish towards apex; two minute cream-coloured spots, separated by the third median branch: secondaries dark blue-green, with purple borders; base of costal area cupreous; a hyaline white streak near abdominal margin. Body red; the antennæ, frons, erest, greater part of tegulæ, three spots on metathorax, the anterior half and posterior margin of each of the abdominal segments, and the greater part of the pectus and legs, blue-black. Expanse of wings 1 inch 9 lines.

United States.

Syntomeida epilais. (Plate VIII. fig. 5.)

Euchromia (Hira) epilais, Walker, Cat. Lep. Het. i. p. 227. n. 42 (1854).

Primaries above dark green; a rounded spot on interno-median area, a second, smaller, within the end of the cell, a third, small and bifid, beyond the end of the cell, a fourth, large, unequally bifid, cut by the third median branch, white: secondaries black-brown, paler towards the base, with a central white spot. Body dark blue-green; a spot on each shoulder, two spots at base of abdomen, two lateral abdominal spots, two lateral spots on basal segments of venter, the base of second pair of tarsi, the proximal two thirds of hind pair, and the coxe, white; two last segments of abdomen deep red. Expanse of wings 2 inches 1 line.

Honduras (Dyson).

Syntomeida? tina. (Plate VIII. fig. 9.)

Euchromia (Tipulodes) tina, Walker, Cat. Lep. Het. i. p. 233. n. 51 (1854). Sphenoptera batesii, Felder, Reise der Nov. Lep. tab. cii. fig. 35 (1874).

Black: primaries with a metallic green discoidal streak, a green dot at the base, and a broad postmedian orange band. Body darker than the wings. Head with a green spot on the crest; base of tegulæ and a spot on each shoulder green; metathorax with a central green spot; abdomen with an interrupted green dorsal line, and lateral green bands; venter with interrupted lateral green bands; coxæ green. Expanse of wings 1 inch 8 lines.

Rio Grande.

The abdomen of this species is more constricted than in the other species of Syntomeida, and the palpi are longer.

EUPYRA, Herrich-Schäffer.

Eupyra ignita. (Plate X. fig. 8.)

Eupyra ignita, Herrich-Sehäffer, Aussl. Schmett. i. pl. 13. fig. 55. Euchromia (Chrysocale) ignita, Walker, Cat. Lep. Het. i. p. 209. n. 5 (1854).

Blue-black: primaries with a small hyaline discoidal spot, and a second larger spot just

beyond the cell; base golden green, becoming reddish towards costa; disk golden green, becoming reddish enpreous at its lower extremity, divided from the basal area by a narrow black band; a central subcostal green streak; base with a few white hair-like scales; antennæ and prothorax greenish; abdomen with two whitish spots at the base, an ill-defined dorsal interrupted line of metallic green, and a confused lateral series of black and white tufts of hair. Wings below dull purplish black: primaries with hyaline spots as above; basal area streaked with blue; a large subapical golden-green patch: secondaries with the costa, internal area, and a large subapical spot blue-green. Body below sprinkled with green and white scales. Expanse of wing 2 inches 2 lines.

Bogota.

Eupyra plebeia. (Plate X. fig. 5.)

Eupyra plebeia, Herrich-Schäffer, Aussl. Schmett. i. pl. 13. fig. 56. Euchromia (Chrysocale) opulenta, Walker, Cat. Lep. Het. i. p. 210. n. 6 (1854).

Primaries golden green, cupreous on the disk; outer margin, an elongate spot in the cell, from which a perpendicular line runs to inner margin, black: secondaries blue-black, brown towards the base. Body as in the preceding species. Wings below golden green, the margins dark brown; secondaries with the discocellulars and a recurrent streak within the cell black. Expanse of wings 1 inch 10 lines to 2 inches 2 lines.

Veneznela (Dyson).

TRICHELA, Herrich-Schäffer.

Trichela tolumnensis. (Plate XIII. fig. 10.)

Trichela tolumnensis, Herrich-Schüffer, Aussl. Schmett. i. pl. 13. fig. 53. Euchromia (Enope) hirsuta, Walker, Cat. Lep. Het. i. p. 208. n. 4 (1854).

Black. Wings greenish, with apical fringes white: primaries with a basal subcostal stramineous litura; a broad irregular hyaline yellow band, interrupted by the submedian and median nervures, the median branches, and radials: secondaries with the basicostal area cream-coloured; abdominal area brown, with a hyaline white submedian streak; disk hyaline yellow, interrupted by the nervures. Body densely covered with hair; antennæ white towards the tips; legs varied with white. Expanse of wings 2 inches.

Bogota?

PSOLOPTERA, Butler.

Psoloptera thoracica. (Plate VIII. fig. 6.)

Euchromia (Autochloris) thoracica, Walker, Cat. Lep. Het. i. p. 243. n. 70 (1854). Psoloptera thoracica, Butler, Journ. Linn. Soc., Zool. vol. xii. p. 369. no. 1 (1876).

Wings black with purple reflections; a white dot at base of primaries. Head brown,

white-spotted; thorax carmine, with a white spot on each shoulder; abdomen dull dark blue brown (with two white spots) at the base; legs brown, spotted with white. Expanse of wings 1 inch 4 lines.

Ega (Bates).

ICHORIA, Butler.

Ichoria quadrigutta. (Plate X. fig. 1.)

Euchromia (Aclytia) quadrigutta, Walker, Cat. Lep. Het. i. p. 245. n. 78 (1854). Ichoria quadrigutta, Butler, Journ. Linn. Soc., Zool. xii. p. 370. n. 1 (1876).

Black-brown: primaries with a metallic-green spot at the base: secondaries with a hyaline white band from abdominal margin across the lower discoccilular to the subcostal nervure; crest, collar, and thorax spotted with metallic green; a carmine spot on each shoulder; abdomen spotted with metallic green at the sides, and with two earmine spots at the base; below paler; pectus spotted with green; trochanters whitish; venter spotted with green laterally. Expanse of wings 1 inch 4 lines.

Mexico (Hartweg).

MACROCNEME, Hübner.

Macroeneme auripes. (Plate VIII. fig. 4.)

Euchromia (Macroenome) auripes, Walker, Cat. Lep. Het. i. p. 250, n. 87 (1854).

Dark brown. Wings shot with purplish blue: primaries with the costal and subcostal veins sprinkled with green seales; a green spot and two white dots at the base; frons, erest, and back of eyes metallic green; thorax with two central green spots, two white spots on the shoulders; abdomen with dorsal and lateral green lines. Wings below brown, with broad subcostal green streaks. Legs streaked with green and white; tarsi of hind pair golden yellow, black at base; venter with broad basal plate banded with white externally. Expanse of wings 1 inch 6 lines.

Honduras (Dyson).

CALLICARUS, Grote.

Callicarus plumipes. (Plate VIII. fig. 2.)

Sphinx plumipes, Drury, Ill. Exot. Ent. ii. pl. xxvii. fig. 3.

Aglaope plumipes, Westwood, ed. Drury, l.c.

Euchromia (Horamia) plumipes, Walker, Cat. Lep. Het. i. p. 252. n. 91 (1854).

Wings brown: primaries with a white dot at the base. Head black, white-spotted; collar and thorax bronzy brown, spotted with white; abdomen brown, shot with blue and banded with white. Body below dark brown, spotted with silver; tibize of hind legs white in the middle; tarsi tipped with white; the leg between the two white spots densely covered with long black-brown hairs. Expanse of wings 1 inch $5\frac{1}{2}$ lines.

Honduras (Dyson).

ORCYNIA, Walker.

Orcynia calcarata. (Plate IX. fig. 11.)

Euchromia (Orcynia) calcarata, Walker, Cat. Lep. Het. i. p. 274. n. 130 (1854).

Wings semitransparent red-brown, black at the base. Body black; antennæ tawny; thorax and head spotted with bright yellow; the basal segments of abdomen with large lateral yellow spots; anns bluish; pectus and venter spotted with yellow; eoxæ and trochanters yellow; tarsi below ferruginous, of hind legs with orange proximal half. Expanse of wings 2 inches 5 lines.

Santarem (Bates).

This is the largest of the hornet-like species of Zygænidæ.

ISANTHRENE, Hübner.

Isanthrene pompiloides. (Plate XII. fig. 10.)

Glaucopis (Isanthrene) pompiloides, Walker, Cat. Lep. Het. i. p. 156. n. 26 (1854).

Wings testaceous hyaline; veins, outer and inner margins, black: primaries with the black margin considerably widened at apex, and throwing off a denticle upon first median branch; costal and interno-basal areas tawny hyaline. Body black; antenna deep ochreous; two ochreous spots on metathorax at base of abdomen; trochanters and coxa spotted with white. Wings below much brighter in colour than above, the costae and most of the veins bright orange. Expanse of wings 2 inches 2 lines.

Guatemala.

HOMŒOCERA, Felder.

Homœocera scintillans. (Plate XII. fig. 4.)

Læmocharis scintillans, Herrich-Schäffer, Auss. Schmett. i. fig. 244. Pœcilosoma scintillans, Walker, Cat. Lep. Het. vii. p. 1605 (1856). Glaucopis (Pœcilosoma) flavitarsis, Walker, l. c. i. p. 158. n. 30 (1854).

Wings testaecous hyaline; the veins, the inner margin, and an apical spot in primaries black; base blue-spotted. Body black; the frons, margins of collar, two dots at the base of primaries, a longitudinal streak on tegulae, four spots on the thorax, seven narrow bands on the abdomen, the inferior margin of the palpi, coxæ, and greater part of venter ochreous; a double series of spots down the body, from the head to the anus, and several spots on the legs metallic blue-green; inner surface of trochanters and femora of first pair of legs white. Expanse of wings 1 inch 5 lines.

Venezuela (Dyson).

Homeocera gemmifera. (Plate XII. fig. 12.)

Gymnelia gemmifera, Walker, Cat. Lep. Het. i. p. 152. n. 19 (1854). Homœocera gemmifera, Butler, Journ. Linn. Soc., Zool. xii. p. 376 (1876).

Wings testaceous hyaline, veins and margins black: primaries with the apex and internal area black; a spot at end of cell and two dots at the base metallic green. Body black; from and back of head, two large spots on the collar, four small spots on the thorax, six broad abdominal bands (interrupted in the middle), some spots on the venter, and the knees of all the legs metallic green; a streak on each tegula, some hairs on metathorax, a central series of abdominal spots, the coxe, trochanters, distal half of femora, and a streak on front tibiæ, castaneous; a band of golden hairs, edged externally by a silvery irregular line, across the venter. Expanse of wings 2 inches 1 line.

Venezuela (Dyson).

Homœocera salvini. (Plate XVII. fig. 4.)

Homœoeera salvini, Butler, Journ. Linn. Soc., Zool. xii. p. 376. n. 8 (1876).

Wings testaceous hyaline, veins and margins black; apex of primaries broadly black; base black, spotted with metallic green. Body black, spotted and banded with bright metallic blue-green; anus reddish orange; anterior margin of the first two or three segments of abdomen narrowly testaceous; coxe, trochanters, and the inner margin of femora of front legs snow-white; front margins of the tibic, and hind margins of the femora of second and third pairs metallic green; tarsi brown; venter with a broad semicircular basal white band; lateral metallic green spots; anus orange. Expanse of wings 1 inch 6 lines.

Obispo, Panamá (Salvin).

This is the most brilliantly coloured of all the species in the genus.

SAROSA, Walker.

Sarosa sesiiformis. (Plate XII. fig. 5.)

Glaucopis (Sarosa) sesiiformis, Walker, Cat. Lep. Het. i. p. 151. n. 19 (1854).

Wings pale testaceous hyaline, veins and margins dark brown: primaries with the apex broadly brown; base brown, spotted with metallic blue-green; secondaries with anal angle brown. Body black; the head, collar, and thorax spotted, the abdomen banded with ochraceous; a spot on the frons, another on each shoulder, and two series on the abdomen metallic blue-green; pectus brown; legs spotted with blue-green, hind tarsi orange; venter brown, banded with ochraceous and spotted with blue-green. Expanse of wings 1 inch 6 lines.

Venezuela (Dyson).

ERRUCA, Walker.

Erruca deyrolii. (Plate XII. fig. 6.)

Læmocharis deyrolii, Herrich-Schäffer, Aussl. Schmett. figs. 247, 251 a.

Wings testaceous hyaline, veins and margins black: primaries sometimes with the apex black; costal and interno-basal areas ochraceous. Body black-brown; from white-spotted; a white dot on each shoulder; abdomen with lateral series of white dots; the fourth and following segments with a white spot on the centre of their hind borders: body below brown, venter with lateral series of white spots. Expanse of wings 1 inch 7 lines.

Rio Grande.

MYRMECOPSIS, Newman.

Myrmecopsis tarsalis. (Plate XIII. fig. 1.)

Glaucopis (Pseudosphex) tarsalis, Walker, Cat. Lep. Het. i. p. 196. n. 98 (1854). Myrmocopsis tarsalis, Butler, Journ. Linn. Soc., Zool. xii. p. 380. n. 1 (1876).

Wings testaceous hyaline, with the veins and margins brown; a broad olive-brown purpleshot costal streak, best marked on primaries; discocellulars of primaries and a short dash on the middle of the costa blue. Body black; palpi below and inner margins of trochanters and femora white; tarsi testaceous. Expanse of wings 1 inch 3 lines.

Pará (Bates).

Like a Eumenes.

Myrmecopsis semihyalina. (Plate XIII. fig. 9.)

Glancopis (Pseudosphex) semihyalina, Walker, Cat. Lep. Het. i. p. 197. n. 99 (1854). Myrmceopsis semihyalina, Butler, Journ. Linn. Soc., Zool. xii. p. 380. n. 2 (1876). Pseudosphex vespiformis, Herrich-Schäffer, Aussl. Schmett. fig. 425.

Wings pale testaceous hyaline, veins and marginal edges black: primaries with the basicostal area (excepting a basal spot below the cell) broadly brown purple-shot; the middle of costa and the discocellulars blue; secondaries brown to near the base, shot with dull blue on the outer margin. Body black; abdomen bluish, with a minute blue dot on each side of the basal segment, the latter pinkish serieeous below; from and pectus bluish; tarsi sordid white at the base. Expanse of wings 1 inch 8 lines.

Pará (Bates).

GYMNELIA, Walker.

Gymnelia lænnus. (Plate XII. fig. 8.)

Glaucopis (Gymnelia) lænnus, Walker, Cat. Lep. Het. i. p. 154. n. 21 (1854).

Wings hyaline white, veins and borders black: primaries with a short black bar upon the discocellulars; secondaries with a black band from the costa, across the discocellulars, to anal angle. Body black; the vertex of the head, two central spots on the collar, and three or four lateral transverse streaks on the basal segments of the abdomen blue-green, the three terminal segments deep orange; two lateral white spots on the collar: body below black; anus orange, coxæ white. Expanse of wings 1 inch 7 lines to 2 inches 1 line.

Rio Janeiro, Brazil.

Gymnelia completa. (Plate XII. fig. 3.)

Glaucopis (Gymuelia) completa, Walker, Cat. Lep. Het. i. p. 153. n. 20 (1854).

Wings as in the preceding species, excepting that the transverse band of secondaries is wanting. Body black; vertex of head, two central spots on the collar, and three series of spots, one central and two lateral, on the abdomen, green; basal segment of abdomen cream-colour; remaining segments with lateral posterior red marginal lines; anus red; two lateral spots on the collar, the coxe, and an arched subbasal ventral band white; middle of venter ochraceous, transversely banded with black. Expanse of wings 1 inch 6 lines.

Pará (J. P. G. Smith).

LÆMOCHARIS, Herrich-Schäffer.

Læmocharis trigutta. (Plate VII. fig. 10.)

Glaucopis (Pseudomya) trigutta, Walker, Cat. Lep. Het. i. p. 145. n. 9 (1854).

Primaries hyaline white; veins, margins, apex, base, and an ill-defined band across the middle of the wing brown: secondaries dark brown, with a subbasal hyaline spot. Body brown; a large spot on each shoulder and two spots on metathorax earmine; genitalia testaceons; anterior trochanters white. Expanse of wings 10 lines.

Bogotá.

THRINACIA, Butler.

Thrinacia afflicta. (Plate VII. fig. 12.)

Glaucopis (Pseudomya) afflicta, Walker, Cat. Lep. Het. i. p. 144. n. 6 (1854). Thrinacia afflicta, Butler, Journ. Linn. Soc., Zool. xii. p. 384. n. 1 (1876).

Wings hyaline white, greyish externally; the veins, margins, and the base of primaries black. Head and abdomen above black; thorax orange: body below black; trochanters whitish internally. Expanse of wings 10 to 11 lines.

Pará (Bates).

PSEUDOMYA, Hübner.

Pseudomya tipulina. (Plate VII. fig. 7.)

Glaucopis unicolor tipulina, Hübner, Samml. evot. Schmett. i. pl. 163. Pseudomya tipulina, Hübner, Verz. bek. Schmett. p. 124. n. 1345 (1816). Glaucopis (Pseudomya) tibia, Walker, Cat. Lep. Het. i. p. 143. n. 5 (1854).

Wings greyish hyaline; the veins, margins, and the base of primaries black; two or

three blue dots at the base. Body black; crest of head bluish; abdomen with a central grey stripe; segments greyish on their posterior margins. Expanse of wings 10 lines.

Pará (Bates).

Pseudomya tenuis, n. sp. (Plate XVII. fig. 1.)

Wings hyaline white, the veins and borders black. Body black; a searlet spot on each shoulder, and a second on each tegula; pectus and venter brown; trochanters and inferior margin of femora white. Expanse of wings 10 lines.

Rapid of Porteira, Rio Trombetas, March 2nd, 1874 (J. W. H. Trail).

PHEIA, Walker.

Pheia albisigna. (Plate VII. fig. 14.)

Glaucopis (Pheia) albisigna, Walker, Cat. Lep. Het. i. p. 146. n. 10 (1854).

Wings hyaline white, with the veins and borders black-brown: primaries with the apex, a spot on the discoccllulars, and the base, black-brown; a scarlet basal spot. Body dark brown; two spots on the collar and one on each shoulder, scarlet; a central white spot on the prothorax, an oblong spot on metathorax, and a large patch on the basal segments of the venter, cream-colour; some lateral spots on the pectus, the trochanters, inferior margin of the femora, and a band towards the apex of the antennæ, white. Expanse of wings 1 inch 1 to 4 lines.

Honduras (Miller), Ega (Bates).

Pheia gemmata. (Plate XVII. fig. 5.)

Pheia gemmata, Butler, Journ. Linn. Soc., Zool. xii. p. 385. n. 2 (1876).

Wings hyaline white; veins, apices, and horders black: primaries with a subcostal orange line and a bifid orange basi-internal patch: secondaries with ochraceous costal area. Body black; frons, crest, a spot at base of primaries, a spot on metathorax, and a series of spots on each side of the abdomen, blue-green; below dull black; trochanters and femora ochraceous; metathoracic portion of pectus and base of venter spotted with blue-green; two lateral anal spots of the same colour; costæ of wings below golden yellow. Expanse of wings I inch 5 lines.

Sta. Martha (Bouchard).

Pheia intensa. (Plate XII. fig. 11.)

Glancopis (Pœcilosoma) intensa, Walker, Cat. Lep. Het, i. p. 159, n. 31 (1854). Pheia intensa, Butler, Journ. Linn. Soc., Zool. xii. p. 386, n. 3 (1876).

Wings testaceous hyaline, margins and veins black: primaries with the apex and base black; secondaries with the apex and anal angle black. Body black; vertex of head, two

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spots on the collar, a streak on each tegula, a central spot on the prothorax, a series down each side of the abdomen, and some lateral spots on the pectus, blue-green; an orange spot on each shoulder; two carmine spots on metathorax; trochanters of front legs white; centre of venter broadly white in front, dusky behind, the terminal segments orange at the sides. Expanse of wings 1 inch 1 line.

Honduras (Dyson).

COSMOSOMA, Hübner.

Cosmosoma panopes. (Plate XII. fig. 9.)

Læmocharis panopes, Herrich-Schäffer, Auss. Schmett. fig. 243. Cosmosoma panopes, Butler, Journ. Linn. Soc., Zool. xii. p. 386. n. 1 (1876). Glaucopis (Peccilosoma) subflamma, Walker, Cat. Lep. Het. i. p. 159. n. 32 (1854).

Wings hyaline white; veins, borders, and the apex of primaries black-brown. Body black; from, vertex of head, and a spot on each shoulder metallic blue; pectus, trochanters, superior surface of femora, the proximal half of the tibiae, and the whole of the tarsi in the posterior legs searlet. Expanse of wings 1 inch 9 lines.

Brazil.

Cosmosoma centralis. (Plate XI. fig. 9.)

Glaucopis (Cosmosoma) centralis, Walker, Cat. Lep. Het. i. p. 171. n. 53 (1854). Cosmosoma centrale, Butler, Journ. Linn. Soc., Zool. xii, p. 387. n. 9 (1876).

Wings hyaline white, with the veins and outer borders dark brown: primaries with the apex brown; a transverse central brown band, in the middle of which is an orange spot; interno-basal area of both wings orange. Body black-brown; a small spot on the head, several on the thorax, and a series on each side of the abdomen, metallic blue; tegulæ and two spots at base of abdomen orange: body below brown; peetus spotted with blue. Expanse of wings 1 inch 2 lines.

Rio Janeiro (Johnson).

Cosmosoma tenthras. (Plate XIII. fig. 5.)

Glaucopis (Cosmosoma) teuthras, Walker, Cat. Lep. Het. i. p. 168. n. 48 (1854).

Wings hyaline white; the veins, outer borders, and apiecs, dark brown: primaries with the costal and internal areas (to near apex and external angle), the base, and a large spot at the end of the cell, scarlet: secondaries with the base searlet. Head black; from metallic green; thorax searlet; a green dot on each shoulder: abdomen black, with three longitudinal series of metallic green spots, the central spots small and wide apart. Body below brown; pectus, anterior trochanters, and sides of venter, green-spotted. Legs red-brown. Expanse of wings 1 inch 8 lines.

Pernambuco (J. P. G. Smith); Venezuela (Dyson).

ILIPA, Walker.

Ilipa braconoides. (Plate XI. fig. 15.)

Glaucopis (Ilipa) braconoides, Walker, Cat. Lep. Het. i. p. 166. n. 44 (1854).

Wings hyaline white, veins and margins dark brown: primaries with a large apical patch and a semicircular spot on discocellulars dark brown; base dark brown, white-spotted. Head dark brown, white-spotted; thorax dark brown; abdomen ochreous; anal segments and a series of five dorsal dots dark brown. Body below as above; trochanters whitish. Expanse of wings 1 inch 7 lines.

Honduras (Dyson).

LEUCOTMEMIS, Butler.

Leucotmemis latilinea. (Plate XI. fig. 10.)

Glaucopis (Ilipa) latilinea, Walker, Cat. Lep. Het. i. p. 167. n. 46 (1854).

Wings hyaline white; veins, borders, apex of primaries, and a band across the middle broadly black-brown; a blue spot at base of primaries. Body black-brown; a spot on each shoulder, the first three segments of abdomen, and the front of the fourth segment, ochreous; a sulphur-yellow spot on each side of the fourth segment: body below black-brown; coxæ white; trochanters cream-colour; basal half of venter ochreous. Expanse of wings 1 inch 4 lines.

Amazons (Bates).

The pattern of the wings in this species is similar to that of *Dycladia ornatula* of Walker.

DYCLADIA, Felder.

Dycladia varipes. (Plate XI. fig. 5.)

Glaucopis (Phacusa) varipes, Walker, Cat. Lep. Het. i. p. 175. n. 62 (1854).

Wings testaceous hyaline: primaries with a central oblique black band from costa to external angle; apex piecous: secondaries with the apex and outer margin black. Head and thorax black, crest and collar greyish white; tegulæ testaceous externally: abdomen scarlet, with two white spots at the base; last two segments black, with lateral white litura; trochanters, front legs, and tarsi of other legs ochraceous; venter white, ochraceous behind, and scarlet at the sides. Expanse of wings 1 inch.

Pará (Bates).

Dycladia picta. (Plate XI. fig. 4.)

Glaucopis (Phacusa) picta, Walker, Cat. Lep. Het. i. p. 176, n. 64 (1854).

Wings hyaline white: primaries with the apex, external angle, and a discocellular spot black; centre of costa, veins of the discoidal cell, and the basal portion of the median branches

DYCLADIA. 33

black; base, costa, and veins between the cell and the apical patch, the margin between the apical patch and external angle, and the basal two thirds of the inner margin ochrous: secondaries with the apex, outer margin, and a spot near the base, black; veins ochrous; eosta creamy white. Body reddish orange; head, a dorsal longitudinal stripe, upper margin of palpi, and the antennæ, excepting near the tips, black: abdomen with two white spots at the base; a central series of spots on the black stripe, and the last two segments grey; froms white: body below ochrous; anus black. Expanse of wings 11 lines.

Pará and Santarem (Bates).

Dycladia bura. (Plate XI. fig. 12.)

Læmocharis bura, Herrich-Schäffer, Auss. Schmett. i. fig. 239. Glaucopis (Phacusa) discifera, Walker, Cat. Lep. Het. i. p. 178. n. 68 (1854).

Wings hyaline white; veins, apiecs, borders, and a discocellular litura on primaries black-brown. Body greyish brown, with an orange stripe down each side; collar orange; head black, dotted with white: body below black; head below, trochanters, and under surface of femora of front legs, white. Expanse of wings 10½ lines.

Pará (J. P. G. Smith).

Dycladia militaris, n. sp. (Plate XVI. fig. 1.)

Primaries pale brown, subhyaline; the nervures, a broad nearly central transverse band, the apical area, and the fringe, sepia-brown: secondaries hyaline white; the veins and a broad outer border black-brown. Head searlet; the frons, antennæ, and a line on the centre of the vertex, brown; thorax and abdomen brown, searlet at the sides: body below brown, sides of pectus searlet; legs and a broad central longitudinal band on the venter creamy whitish. Expanse of wings 1 inch 1 line.

Silves, Amazons; taken at light, 19th April, 1874 (J. W. H. Trail).

Dycladia dorsalis. (Plate XI. fig. 6.)

Glaucopis (Phacusa) dorsalis, Walker, Cat. Lep. Het. i. p. 177. n. 65 (1854).

Primaries black-brown; a triangular patch towards the base and a spot beyond the middle (crossed by yellow veins) byaline white: secondaries hyaline white; the base and veins ochreous; costa pale brown; a central litura and the outer border (widest at apex and anal angle) black. Body dark brown; an orange stripe down each side; base of all the wings below ochreous; pectus testaceous, anterior trochanters white, venter ochreous. In the female the legs are black, with the anterior tarsi testaceous below; the venter with a black stripe on each side and a central black spot. Expanse of wings $\delta 9_{\frac{1}{2}}$ lines, $\epsilon \approx 10$ lines.

Santarem (Bates).

Walker's description is taken from two male examples.

Dycladia teda. (Plate XI. fig. 1.)

Glaucopis (Phacusa) teda, Walker, Cat. Lep. Het. i. p. 177. n. 67 (1854).

Wings dark bronzy brown: primaries with a carmine spot at the base and above it a hyaline white dot; a large hyaline white spot just before the middle, and a second beyond the end of the eell, both crossed by brown veins: secondaries with the disk hyaline white, crossed by brown veins. Body dark brown, two spots on the collar and the lateral margins of the abdominal segments carmine; a white spot on each side at the base of abdomen. Secondaries below carmine at base of costal area; palpi at the base, a row of marginal ventral spots, and some hairs round the anus carmine; trochanters, underside of anterior femora, and a longitudinal ventral stripe sordid white. Expanse of wings 11 to $11\frac{1}{2}$ lines.

Sta. Catharina (Becker).

Dycladia lacteata, n. sp. (Plate XVII. fig. 3.)

Wings cream-colonred, veins black: primaries with the base, costa, discoidal cell, outer margin, apieal area, external angle, and a diffused streak uniting the latter to the end of the cell, brown; secondaries with the apex, outer margin, and anal angle, brown. Body dark brown; a white dot behind each eye; inner half of each tegula carmine; a small basal spot on each side of the abdomen, and an elongate central spot, crossing the first four segments, cream-coloured. Wings below paler than above. Body brown; pectus and a lateral row of ill-defined ventral dots creamy. Expanse of wings 11 lines.

Rio Jutahi; taken 5th February, 1875 (J. W. H. Trail).

MARISSA, Walker.

Marissa columbina. (Plate XI. fig. 3.)

Zygæna columbina, Fabricius, Ent. Syst. iii. p. 403. n. 57 (1793). Eunomia columbina, Hübner, Exot. Schmett. Zutr. figs. 9, 10 (1806). Glaucopis (Marissa) columbina, Walker, Cat. Lep. Het. i. p. 174. n. 59 (1854). Glaucopis multicineta ♂, Walker, l. c. vii. p. 1606 (1856). ? ♀ Læmocharis fasciatella, Ménétriés, Enum, Corp. Anim. pl. xiv. fig. 4 (1857).

Wings hyaline white; the veins, outer borders, and a discocellular spot on primaries dark brown; a spot of earmine on the discocellular spot and a second near external angle. Body black, streaked and transversely striped with white; a spot on the head, three large spots on basal segment of abdomen, a central stripe on the third segment, and lateral spots on the remainder, earmine; second segment white, with a central black litura. Body below white, spotted with earmine; legs with the femora carmine in front, the tarsi black. Wings below with subapical squamose carmine streak. Expanse of wings 1 inch 1 line.

Haiti (Tweedie).

Marissa multicincta. (Plate XI. fig. 11.)

Glaucopis (Pœcilosoma) multicincta &, Walker, Cat. Lep. Het. i. p. 163. n. 40 (1854).

Wings hyaline; the veins, borders, and a discocellular spot on primaries black-brown. Body brown, with two parallel longitudinal series of ill-defined greenish grey squamose spots; collar and base of abdomen spotted with carmine, outer edge of tegulæ, lateral abdominal series of spots, anal tuft, and three ventral stripes on the last segments, carmine; hind margin of collar, inner edge of tegulæ, and a series of transverse lines from the mesothorax to the anus, white; sides of pectus brown; trochanters within and femora and tibiæ below white; sides of trochanters metallie blue; venter white, spotted at the sides with earmine and black; a black spot in front of the three subterminal carmine stripes. Expanse of wings 1 inch 5 lines.

Haiti (Cuming).

HYSIA, Walker.

Hysia melalenca. (Plate XI. fig. 2.)

Glaucopis (Hysia) melaleuca, Walker, Cat. Lep. Het. i. p. 173, n. 58 (1854).

Primaries hyaline white; the veins, apex, and borders black: secondaries black, with a hyaline white streak below the cell and a spot in the cell. Body black; head and thorax spotted with white; abdomen greyish, with central and marginal sordid whitish longitudinal stripes: body below greyish brown; trochanters, a basicentral stripe on the venter, and a spot at anus white. Expanse of wings 1 inch.

Pará (Bates).

DESMIDOCNEMIS, Moeschler.

Desmidocnemis platyleuca. (Plate XIII, fig. 2.)

Glaucopis (Herea) platyleuca, Walker, Cat. Lep. Het. i. p. 198. n. 102 (1854).

Wings hyaline white, veins and margins black: primaries with a few ercam-coloured hairs at base of costal area; secondaries with the costa snow-white. Body black; anterior part of frons white; crest and hind margin of head dotted with whitish; anterior and inner margins of tegulæ whitish; abdomen with a whitish marginal line: body below white; legs black above; venter with a blackish marginal line. Expanse of wings 10½ lines.

Venezuela (Dyson).

HYDA, Walker.

Hyda xanthorhina. (Plate XI. fig. 8.)

Eurata xanthorhina, Herrich-Schäffer, Auss. Schmett. i. fig. 226. Hyda xanthorhina, Walker, Cat. Lep. Het. vii. p. 1616 (1856). Glaucopis (Hyda) basilutea, Walker, l. c. i. p. 182. n. 75 (1854).

Wings hyaline white, the base broadly orange; veins beyond the basal area, the margins,

a litura on the discocellulars, the apex of primaries, a basicostal spot, a transverse subbasal litura, and the anal angle of secondaries, black. Body sulphur-yellow; the collar, tegulæ, and a subanal broad band on the abdomen, orange; antennæ, a spot on the frons, and three rows on the abdomen, black; pectus sulphur-yellow; legs, excepting the coxæ, trochauters, and underside of femora, black; venter yellow; a large patch at the base and the anus black; the anus spotted with blue. Expanse of wings 11 lines to 1 inch.

Pernambueo (Smith), Santarem (Bates), Santa Martha (Bouchard), Pacho, New Granada.

METHYSIA, Butler.

Methysia notabilis. (l'late VII. fig. 11.)

Glaucopis (Pseudomya) notabilis, Walker, Cat. Lep. Het. i. p. 144. n. 7 (1854).

Primaries hyaline white; veins, borders, and internal area black: secondaries with the costal half, excepting the fringe, silvery whitish; abdominal half and fringe black: head and collar grey, black-spotted; thorax orange; abdomen brown; pectus orange in front, brown behind; legs brown, anterior pair white internally. Primaries below with white internal area; secondaries brown. Expanse of wings $11\frac{1}{2}$ lines.

Pará (Butes).

MALLODETA, Butler.

Mallodeta æcyra. (Plate XIII. fig. 6.)

Læmocharis æcyra, Herrich-Schäffer, Auss. Schmett. i. fig. 250. Glaucopis (Hyda) sortita, Walker, Cat. Lep. Het. i. p. 184. n. 77 (1854).

Wings testaceous hyaline: primaries with the veins (excepting part of the median) and the margins black-brown; outer border well marked, especially at apex; a subcostal orange line; the median vein, excepting its extremities and the basal two fifths of its first branch, testaceous; two interno-basal red streaks; a white dot at base: secondaries with the veins and margins black; costal area ochreons. Body black; frons, a dot on each side of the collar, and three imperfect series on the abdomen, white: body below black, white-spotted. Expanse of wings 1 inch 6 lines.

Amazons (Bates).

LAGARIA, Walker.

Lagaria vulnerata. (Plate XII. fig. 2.)

Læmocharis vuluerata, Herrich-Schäffer, Auss. Schmett. i. fig. 238. Lagaria vuluerata, Walker, Cat. Lep. Het. vii. p. 1607 (1856). Glaucopis (Lagaria) crythrarchos, Walker, l. c. i. p. 164. n. 42 (1854).

Wings hyaline white; veins, margins, apices, base of costa, and a discoeellular spot in primaries, black-brown; interno-basal areas vermilion; costa of secondaries white. Body

dark brown; a spot on each shoulder, a streak on each tegula, a tuft on each side of the basal abdominal segment, and two spots on the third segment, vermilion; two white spots on the basal segment. Primaries below with the interno-basal area white; a vermilion patch at the base of interno-median interspace: secondaries with the base of costal area vermilion; the proximal ends of the second and third pairs of tibia and a row of marginal spots on each side of the venter white. Expanse of wings 2 inches.

Brazil (Low).

SCHASIURA, n. gen.

Resembles Gymnelia, excepting that the primaries are slightly longer and the body is more slender.

Third median branch of primaries and the lower radial nervure running close together at their origins (not emitted from a footstalk); discoellulars of secondaries transverse, feebly arched; three median branches, the second and third emitted together at the end of the discoidal cell. Type S. mimica, n. sp.

Schasiura mimica, n. sp. (Plate XVI. fig. 6.)

Wings hyaline white, with black veins and borders; primaries with a short black bar upon the discocellulars. Body black; the frons, a spot on each shoulder, a spot on the centre of the prothorax, another on metathorax, one on each side of the basal segment of abdomen, one (in the shape of an I) in the middle, and the collar and coxe below snow-white; subterminal segment carmine at the sides and in the centre; terminal segment wholly carmine. Expanse of wings 1 inch 10 lines.

Barreiras das Araras, Rio Solimões, taken by sweeping amongst maize, January 16, 1874 (J. W. H. Trail).

HYELA, Walker.

Hyela sanguinea. (Plate XI. fig. 13.)

Glaucopis (Hyela) sanguinea, Walker, Cat. Lep. Het. i. p. 172, n. 55 (1854).

Wings hyaline white; the veins, borders, and a black discocollular spot in primaries black-brown. Body bronze-brown; head shot with blue, collar with green; back of collar, tegulæ, two parallel abdominal stripes, and the anal tuft, vermilion; basal segment of abdomen with three blue spots; pectus and part of legs black, the sides of pectus speckled with blue, the coxæ pale red; trochanters, under margin of front femora, hind tarsi, and collar, cream-colour; venter brown, irrorated with red, the base covered by a white-edged red plate; anal tuft vermilion. Expanse of wings 1 inch 2 lines.

Hab. ——?

Hyela astrifera, n. sp. (Plate XVII. fig. 2.)

Wings hyaline white; veins and borders black-brown; primaries with a black spot at end of cell. Body black; head metallic green; centre of prothorax, a row of indistinct dots down the centre of abdomen, and two lateral basal dots, dull metallic green; back of collar, inner margin of tegulæ, sides of metathorax, lateral tapering abdominal streaks, and the anal tuft carmine; anterior trochanters and hind tarsi white; trochanters of second and third pairs of legs and the coxe rose-red; anus red. Expanse of wings 1 inch 2 lines.

Braga, Rio Javary; taken December 7, 1874 (J. W. H. Trail).

Hyela stipata. (Plate XIII. fig. 8.)

Glancopis (Hyda) stipata, Walker, Cat. Lep. Het. i. p. 184. n. 78 (1854).

Wings hyaline white; veins, borders, apex, and a discocellular litura in primaries, black. Body black, with a greenish gloss; head and collar spotted with white; tegulæ and centre of thorax streaked with sordid whitish; abdomen with three rows of testaceous spots, the lateral series interspersed with earmine dots; and tuft carmine; peetus and legs white, varied with brown; venter cream-colour, with central series of triangular black spots; lateral series of red spots, and reddish hairs round the anus. Expanse of wings 1 inch 4 lines.

Pará (Bates).

EUNOMIA, Hübner.

Eunomia andromacha. (Plate XIII. fig. 3.)

Sphinx andromacha, Fabricius, Sp. Ins. ii. p. 161. n. 20 (1781). Ennomia andromacha, Hübner, Verz. bek. Schmett. p. 125. n. 1357 (1816). Glaucopis (Dinia) finalis, Walker, Cat. Lep. Het. i. p. 190. n. 88 (1854).

Wings hyaline white; veins, bases, borders, and a discocellular litura in primaries, black. Body black; a spot on each shoulder white; a streak on inner margin of tegulæ metallic greenish blue; anal segment and tuft deep orange; palpi below, trochanters, and base of venter snow-white. Expanse of wings 1 inch 2 to 4 lines.

Pará (Bates), Venezuela (Dyson).

TRICHURA, Hübner.

Trichura latifascia. (Plate XI. fig. 7.)

Glaucopis (Trichura) latifascia, Walker, Cat. Lep. Het. i. p. 193. n. 91 (1854).

Wings hyaline white; veins, borders, and a bar on discoccllulars of primaries, black. Body greenish black; head, collar, and thorax spotted with metallic blue-green: body below purplish; pectus spotted at the sides with green; palpi below, coxæ, and trochanters, white; femora with purplish or green streaks; base of venter white. Expanse of wings I inch I to 4 lines.

Pará (Bates).

Trichura esmeralda. (Plate XIII. fig. 11.)

Glaucopis (Trichura) esmeralda, Walker, Cat. Lep. Het. i. p. 194. n. 93 (1854).

Wings hyaline white; veins, margins, a discocellular litura on primaries, and the apex of secondaries, black; base, veins at base, and basal half of inner margin of primaries, ochreous. Body black-brown, spotted with metallic green; base of abdomen white at the sides: body below brown, pectus spotted with green; front and hind trochanters, base of venter, and two lateral subbasal spots, white; femora streaked with blue. Expanse of wings I inch 6 lines.

Honduras (Dyson).

HEREA, Walker.

Herea metaxanthus. (Plate XII. fig. 7.)

Glaucopis (Herea) metaxanthus, Walker, Cat. Lep. Het. i. p. 198. n. 100 (1854).

Wings hyaline white; the veins and margins black: head and thorax black; abdomen orange; the base, anus, and a longitudinal dorsal line, black; scape of antennæ white; venter ochreous; preanal segment cream-colour; anal segment cream-colour in front, black behind. Expanse of wings 1 inch.

Pará (Bates).

Herea ruficeps. (Plate XIII. fig. 4.)

Glaucopis (Herea) ruficeps, Walker, Cat. Lep. Het. i. p. 198. n. 101 (1854). Herea ruficeps, Walker, l. c. vii. p. 1620 (1856).

Wings hyaline white; the veins, margins, and generally a discocellular line in primaries, black. Body bronzy brown; head and collar rnst-red: body below dark brown; hinder portion of metathorax and base of abdomen white. Expanse of wings 11 to 12 lines.

Pará and Tapajos [not Santarem] (Bates).

The example from Tapajos is the one figured.

MALLOSTETHUS, Butler.

Mallostethus metamelas. (Plate VII. fig. 10.)

Glaucopis (Pseudomya) metamelas, Walker, Cat. Lep. Het. i. p. 145. n. 8 (1854).

Primaries blackish subhyaline; the base, internal area, margins, and veins, black: secondaries hyaline white; the veins, borders, and internal area, black. Head and thorax deep ochreous; abdomen black: body below black; collar deep ochreous; anterior trochanters spotted with sordid white. Expanse of wings 1 inch 1 line.

Pará (Grahame and Bates).

PROCALYPTA, Butler.

Procalypta subcyanea. (Plate VIII. fig. 11.)

Euchromia (Endera) subcyanca, Walker, Cat. Lep. Het. i. p. 230, n. 48 (1854).

Dark purplish brown: primaries with three large hyaline spots, one (with opaque lower border) on interno-median area, the second towards the end of the cell, the third bifid, beyond the cell: secondaries with the costal area shining green, changing in some lights to opaline; three small hyaline white spots in an oblique series: antennæ and head black; collar black, with a white spot on each side; thorax with a white spot on each shoulder; tegulæ black, with a white spot near the base; abdomen blue at the sides. Interno-basal half of primaries below and three submarginal squamose spots blue-green; inner margin pearly white: secondaries brilliant ultramarine, with a black patch running obliquely from the end of the cell to the costa near apex: the wings in other respects as above: anterior trochanters snow-white; femora and tibiæ streaked with blue and white. Expanse of wings 2 inches 1 line.

Mexico (Hartweg).

CERAMIDIA, Butler.

Ceramidia obscura, n. sp. (Plate XVI. fig. 5.)

Above dark olive-brown: primaries with bronze reflections; a metallic bronzy streak at base of costal area: secondaries with the costal area dull brown; two metallic green dots between the eyes; collar red at the sides; metathorax with a central metallic bronze streak; basal segments of abdomen with an ill-defined central line and interrupted lateral streaks of metallic bronze. Wings below bronzy green; primaries with internal area brown: collar scarlet at the sides; trochanters sordid white, front pair with a central clongate blackish spot; venter sordid white in the centre, brown at the sides. Expanse of wings 1 inch 4 lines.

Forest near Sobral, Rio Purus, 17th September, 1874 (J. W. H. Trail).

ANTICHLORIS, Hübner.

Antichloris anthracina. (Plate IX, fig. 7.)

Euchromia (Anyeles) anthracina, Walker, Cat. Lep. Het. i. p. 253. n. 93 (1854).

Wings above dark piecous: primaries with the apex broadly hyaline; secondaries with the costal area broadly whitish sericeous. Body black; peetinated portion of antennæ purplish. Wings below paler than above: primaries with a curved white submedian streak: secondaries with the costal area black; a white interno-basal streak. Body below dark brown; collar with a lateral earmine dot; anterior trochanters and tarsi whitish; base of venter covered by a silver transverse spot. Expanse of wings 1 inch 3 lines.

Venezuela.

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ACLYTIA, Hübner.

Aclytia halys. (Plate X. fig. 6.)

Sphinx halys, Cramer, Pap. Exot. iv. p. 129, pl. 357. fig. C (1784). Aclytia halys, Hübner, Verz. bek. Schmett. p. 123. n. 1337 (1816). Aclytia heber, var., ♀, Walker, Cat. Lep. Het. vii. p. 1631 (1856).

Primaries olive-brown; a narrow, slightly oblique postmedian band: secondaries hyaline white, the veins and borders black. Head black; margins of frons and two spots behind the eyes ochreous; collar black, the anterior and lateral margins ochreous; thorax and base of abdomen dark brown, remainder of abdomen blue, with purplish reflections. Primaries below with white inner margin. Body dark brown; palpi below orange; upper surface of trochanters and a median stripe on the venter bright ochreous; coxæ white. Expanse of wings 1 inch 3 lines.

Santarem (Bates).

Aclytia flavigutta. (Plate VIII. fig. 3.)

Euchromia (Aclytia) flavigutta, Walker, Cat. Lep. Het. i. p. 246. n. 79 (1854).

Nearly allied to the preceding species, but the transverse band of primaries reduced to a small spot at end of cell. Body dark brown; two dots behind the eyes and the lateral margins of the collar ochreous; abdomen broadly metallic green at the sides; trochanters and ventral stripe white. Expanse of wings 1 inch 3 lines.

Brazil.

The colouring of the abdomen alone readily distinguishes this species from A. halys. In A. heber, which comes nearer to A. flavigutta, the head and collar are spotted with white, and the trochanters and ventral stripe are of a purer white colour; the secondaries also have a narrower black border.

CHARIDEA, Dalman.

Charidea submacula. (Plate XIII. fig. 7.)

Euchromia (Automolis) submacula, Walker, Cat. Lep. Het. i. p. 214. n. 13 (1854).

Dark brown: primaries with a carmine basicostal streak, below which is a metallic green streak, base and inner margin streaked with green; a rather broad interno-median carmine streak, yellowish on its lower edge; a subapical ochreous band, becoming red at each extremity: secondaries shot with blue at the base; two ill-defined carmine spots beyond the middle. Body spotted and banded with metallic green. Wings below dark brown: primaries with a broad interno-median carmine patch, yellowish on its lower edge; subapical band as above: secondaries with the interno-basal area brilliantly shot with metallic green; three

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bright carmine spots. Body brown, spotted and banded with green; legs white internally (excepting the tarsi), brown irrorated with green externally. Expanse of wings 1 inch 9 lines to 2 inches 1 line.

Venezuela (Dyson).

Mr. Meldola has received this species from Trinidad.

Charidea arrogans. (Plate XIII. fig. 12.)

Euchromia (Automolis) arrogans, Walker, Cat. Lep. Het. i. p. 214. n. 14 (1854).

Black: primaries streaked with metallic green; an elongated basimedian spot, a quadrate spot in the cell, and an oblique subapical band darker or paler ochreous: secondaries feebly shot with dark blue; a broad carmine outer border, not reaching the costa or anal angle. Body spotted and banded with green. Below nearly as above, but the median spot near the base of primaries obsolete. Expanse of wings 1 inch 10 lines.

Venezuela (Becker), Veragna (Salvin).

Charidea alonzo. (Plate X. fig. 11.)

Charidea alonzo, Butler, Journ. Linn. Soc., Zool. xii. p. 415. n. 4 (1876). Euchromia fastuosa, var., Walker, Cat. Lep. Het. i. p. 215 (1854).

Primaries dark brown, base streaked with metallie green; a subbasal spot, a spot in the cell, and a narrow subapieal stripe, earmine: secondaries black, shot with blue; a broad earmine border, not reaching the costa or the anal angle. Head and collar metallie green, with black margins; tegulæ green internally, brown externally; thorax brown, with a dot on each shoulder and a central stripe, green; abdomen almost wholly green, with ultramarine reflections. Primaries below dark brown, shot with blue and streaked with green at the base; a quadrate spot in the cell and a rather broad subapical band, lake-red: secondaries with interno-basal area shot with green; outer border as above. Body golden green; legs brown internally, tarsi brown. Expanse of wings 1 inch 9 lines.

Venezuela (Dyson).

Quite distinct from C. fastuosa.

Charidea hurama. (Plate XVIII. fig. 8.)

Charidea hurama, Butler, Journ. Linn. Soc., Zool. xii. p. 416. n. 11 (1876).

Primaries dark brown, streaked with green at the base; an elongate interno-basal spot, an elongate discoidal spot (only separated from the first by the median vein), and an oblique trifid subapical band or spot, fleshy pink: secondaries black, shot with ultramarine; fringe ochraceons. Head and thorax brown, spotted and striped with green; abdomen green, banded with brown. Wings below nearly as above, but the discoidal and interno-basal spots

coalescent, dull rose-red, the subapical spot redder; bases of all the wings metallic green: body brown, green-spotted. Expanse of wings 1 inch 9 lines.

Eenador (Buckley).

Charidea gloriosa. (Plate X. fig. 10.)

Euchromia (Automolis) gloriosa, Walker, Cat. Lep. Het. i. p. 215. n. 16 (1854).

Wings black: primaries with a median streak and an oval oblique spot crossing the second median branch, carmine; base, two internal stripes, and two subcostal dots beyond the cell metallic green: basal half of secondaries shot with blue, and reflecting greenish metallic streaks. Body blue-green, varied with brown. Wings below much as above, but brilliantly shot (to beyond the middle) with blue and golden green: primaries with the median streak considerably broader, and not reaching the base: anterior legs white internally. Expanse of wings 1 inch 6 to 7 lines.

Guatemala (Sallé).

METRIOPHYLA, n. gen.

Nearly allied to *Heliura*, but the sexes alike: the secondaries more truncate than in *Heliura* \mathfrak{P} , the first subcostal more pronounced, upper discoellular less inarched and slanting forwards; the second and third median branches emitted from a short footstalk. Type M. apicalis.

Metriophyla apicalis. (Plate VIII. fig. 7.)

Charidea apicalis, Herrich-Schäffer, Auss. Schmett. i. fig. 236. Histioca apicalis, Walker, Cat. Lep. Het. vii. p. 1624 (1856). Heliura apicalis, Butler, Journ. Linn. Soc. p. 417, pl. 29. fig. 9 (1876). Euchromia albiplaga, Walker, Cat. Lep. Het. i. p. 218. n. 21 (1854).

Black-brown: wings with white apical spots: primaries with a short costal streak, a long internal streak, and a spot in the cell, metallic green. Head spotted with green; collar, margins of tegulæ, a central thoracic line, and three rows of spots on the abdomen, metallic green; a white spot on each shoulder; antennæ steel-blue above. Primaries below with a basal streak, a large spot in the cell, and two spots beyond it, metallic green: secondaries with the base of costal area, the lower half of the cell, a streak below it, two abdominal streaks, and two subapical spots, metallic green; apical white spot larger than above; fringe white; coxæ and femora below metallic green; sides of venter spotted with green; palpi below, trochanters, superior surface of tibiæ, and a central longitudinal ventral streak, white. Expanse of wings 1 inch 7 lines.

Venezuela (Dyson), Veragua (Salvin).

Sphinx porphyria of Cramer, and Dioptis glaucopoides of Walker, may be referred to the above genus, unless it be considered preferable (on account of their broader wings) to retain Walker's name Erchia for them.

HELIURA, Butler.

Heliura solicanda. (Plate IX. fig. 4.)

Heliura solicauda, Butler, Journ. Linn. Soc., Zool. xii. p. 418, n. 8 (1876). Euchromia (Eucereeon) tetragramma, var. β, Walker, Cat. Lep. Het. i. p. 268 (1854).

Wings pearly white: primaries black-spotted at the base, an irregular central black band, made up of congregated black spots; the apex black; veins of the male testaceous, reddish in part, of the female cream-colour; the outer margin and an apical submarginal transverse line, whitish: secondaries with the veins and outer border black in the male, brown in the female. Head and thorax coloured like the primaries; abdomen searlet, basal segments in the male pink at the sides; anus black. Wings below black-brown, leaving the pearly areas as above; pectus brown; trochanters and femora ochraceous, tinted with pink; venter rose-red, with a black line on each side. Expanse of wings 1 inch 4 lines.

Honduras (Dyson).

Heliura gnoma, n. sp. (Plate XVI, fig. 2.)

Primaries blackish brown, veins slightly paler: secondaries hyaline white; the veins and a broad outer border black, shot with blue; abdominal margin with a broad sandy whitish brush of hairs. Body black-brown; from white-spotted; back of head and collar spotted with searlet; proximal half of abdomen almost covered by a large metallic green patch. Body below brown; head whitish; trochanters of first pair of legs, sides of femora and tibiæ, and a large basal patch on the venter, white. Expanse of wings 1 inch 2 lines.

Rio Padaniry (an affluent of the Rio Negro), under the equator, taken 26th June, 1874 $(J.\ W.\ H.\ Trail)$.

Heliura lamia, n. sp. (Plate XVI. fig. 3.)

Primaries of male smoky brown, of female olive-brown: secondaries hyaline white; the veins and a broad outer border black-brown; abdominal margin of the male with a slender sandy whitish brush of hairs. Body brown, darkest in the male; from white-spotted; back of head and collar spotted with searlet; abdomen, excepting the base and anus, metallic green. Body below brown; head whitish; trochanters of first pair of legs searlet; underside of femora and tibia and an interrupted stripe on each side of the venter, white. Expanse of wings δ 1 inch δ lines, δ 1 inch δ lines.

∂. Rio Mauhes, 5° 30′ S., 29th April, 1874;
♀. Tanaria, Rio Purus, 1st October, 1874.

(J. W. H. Trail).

The female is represented on the Plate.

TELIONEURA, Felder.

Telioneura brevipennis, n. sp. (Plate XVI. fig. 9.)

¿. Wings as in *T. subplena*, but shorter; the anal angle of secondaries covered with elongated creamy whitish scales. Body black-brown; two orange spots on the collar; anal tuft, underside of legs, trochanters of first pair, a broad central longitudinal stripe on the venter, and the inner half of secondaries below, creamy whitish; tegulæ margined with testaceous. Expanse of wings 11 lines.

Guajaratuba, Rio Purus, 11th of September, 1874 (J. W. H. Trail).

ACRIDOPSIS, Butler.

Acridopsis marica. (Plate IX. fig. 6.)

Sphinx marica, Cramer, Pap. Exot. i. p. 31, pl. 20. figs. F, G (1779). Eucereon marica, Hübner, Verz. bek. Schmett. p. 123. no. 1335 (1816). Euchromia (Eucereon) grylloides (pt.), Walker, Cat. Lep. Het. i. p. 271. n. 125 (1854).

Primaries greenish subhyaline, the borders, a spot in the cell, an interno-median longitudinal line near the base, an irregular broad transverse band beyond the middle, and a large subapical spot, crossing the costal, subcostal, and upper radial nervures, black; veins and several costal spots ochreous: secondaries greenish subhyaline; the veins, costa, apex, and outer border, black. Body brown; two spots on the frons, the margins of the collar, teguke, and metathorax, ochreous. Wings below brown, with the subhyaline areas white. Body below brown; centre of pectus sandy whitish; trochanters dull orange. Expanse of wings 1 inch 6 lines.

Pará (Grahame).

The second specimen referred to E. grylloides by Mr. Walker is very distinct.

AUTOMOLIS, Walker.

Automolis contraria. (Plate IX. fig. 9.)

Euchromia (Dipænæ) contraria, Walker, Cat. Lep. Het. i. p. 259. n. 104 (1854). Automolis contraria, Butler, Journ. Linn. Soc., Zool. xii. p. 421. n. 8 (1876).

Primaries above bright orange; a large black-brown apical spot, enclosing an oblique white spot; outer border greyish brown; fringe pale ochreous: secondaries sordid pale ochreous; anal angle and a tapering outer border dark brown. Head black; from and vertex spotted with shining opaline; two whitish spots on the crest; collar and thorax bright orange, with a central longitudinal black line; abdomen black, clothed at base with ochreous hairs; three series of silvery green spots, the central series restricted to the anal half. Wings below paler than above; apical veins of primaries white. Body below cream-colour, banded

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with black; venter with lateral marginal series of silvery green spots. Expanse of wings 1 inch 6 lines.

Ega (Bates).

Automolis zenzeroides, n. sp. (Plate XVI. fig. 8.)

General aspect of A. contraria. Above ochre-yellow: primaries with an elongate basicostal blackish spot crossed by white nervures; apex and outer margin to second median branch blackish brown; two subapical white spots: secondaries with a rather narrow brown outer border, tapering from anal angle to subcostal nervure; from whitish; vertex of head and collar black-spotted; anal half of abdomen black, with dorsal and lateral series of metallic blue spots. Body below whitish testaceous; trochanters of last pair of legs with a few metallic blue scales. Expanse of wings 1 inch 3 lines.

Near Porto Salvo, Rio Purus, taken 3rd October, 1874 (J. W. H. Trail).

Automolis fulgurata. (Plate XVIII. fig. 5.)

Automolis fulgurata, Butler, Journ. Linn. Soc., Zool. xii. p. 420. n. 3 (1876).

Wings above dark brown: primaries with a central longitudinal broad orange streak: secondaries with a broad costal orange streak. Head black, spotted with metallic blue and orange; collar black, with lateral orange bands; thorax and base of abdomen dark brown; tegulæ orange; abdomen, excepting at the base, blue-black, with three incomplete series of silvery greenish spots; trochanters spotted with green and orange; venter dull black, with lateral series of blue-green dots; basal segments with orange spots on each side. Expanse of wings 1 inch 10 lines.

Espiritu Santo. (The collection of which this insect formed part was purchased of a dealer who unfortunately could not supply more definite information as regards the habitat.)

Automolis ameoides. (Plate XVIII. fig. 4.)

Automolis ameoides, Butler, Journ. Linn. Soc., Zool. xii. p. 421. n. 10 (1876).

Primaries golden yellow; the outer border, a central oblique band from costa to external angle, and the internal border, excepting at the base, greyish brown, with darker edging; secondaries deeper yellow, with a rather broad, external and abdominal, dark brown border. Body the same colour as the secondaries; head black, spotted with greenish blue; collar and thorax with a central dark brown longitudinal streak; metathorax with a central metallic greenish blue spot; abdomen with its outer two thirds black, with three series of greenish-blue spots; base brown; yellow area with a central black spot, and two black-edged blue spots on each side. Wings below more uniform than above; primaries with the band and border dark brown; pectus brown, streaked with green; trochanters spotted with green and ochreous; venter ochreous, banded with dull black, and spotted with green at the sides; anus black. Expanse of wings 2 inches 2 lines.

Ecuador (Buckley).

PIONIA, Walker.

Pionia lycoides. (Plate VIII. fig. 10.)

Euchromia (Pionia) lycoides, Walker, Cat. Lep. Het. i. p. 256. n. 97 (1854).

Primaries black, the base and a broad irregular band beyond the middle ochrous: secondaries greyish hyaline, with the veins and diffused borders dark brown; two oblong ochrous costal spots. Body black, ochrous at the sides; basal half of palpi, coxæ, distal half of trochanters, basal half of venter, and a central streak connected therewith, ochrous; joints of palpi and legs whitish. Expanse of wings 1 inch 10 lines.

Venezuela (Dyson); Rio Janeiro.

POMPOSTOLA, Hübner.

Pompostola vicaria. (Plate X. fig. 4.)

Euchromia (Pompostola) vicaria, Walker, Cat. Lep. Het. i. p. 207. n. 2 (1854).

Wings purplish brown: primaries with an interno-median cunciform patch towards the base, and a postmedian spot, deep orange; base of costa green: secondaries with the basal area orange. Body black-brown; frons, collar, tegulæ, and a central spot on prothorax, glittering metallic blue-green; middle of meso- and metathorax and front margins of the abdominal segments, golden green; body below purplish black, sides of pectus metallic green; trochanters and a spot on the hind tibiæ white; upper margins of second and third femora and underside of the tibiæ, testaceous. Expanse of wings 1 inch 5 lines.

Ashanti; Sierra Leone (Foxcroft).

RHIPHA, Walker.

Rhipha strigosa. (Plate IX, fig. 12.)

Euchromia (Rhipha) strigosa, Walker, Cat. Lep. Het. i. p. 273. n. 128 (1854).

Black: wings blue-black: primaries with the nervures at the base, a longitudinal streak in the eell, and five parallel streaks (the first and fifth broad and wedge-shaped) from the upper radial nervure to the inner margin: secondaries with the central area greyish. Head and collar spotted with white; tegulæ white, with black margins; metathorax with a central white spot; abdomen with four golden-yellow spots on each side. Wings below blue-black, nervures and fringe brown: primaries with all the white streaks, excepting the uppermost on the disk, obsolete: secondaries with a trifid white streak below the cell: palpi fringed with white at the base; legs white below the knees; anterior trochanters orange; venter ochreous, black at the sides. Expanse of wings 1 inch 9 lines.

Rio Janeiro.

Eucyrta subulifera of Felder seems to be a variety of this species, in which the white patch on the under surface of secondaries appears above.

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EPANYCLES, Butler.

Epanycles stellifera, n. sp. (Plate XVI. fig. 10.)

Primaries black, with green reflections; a bronze spot at apex (postmedian area sub-hyaline*); a submarginal irregular series of white-edged black spots; white dots are also scattered here and there over the wing, but are most numerous towards the base: secondaries greyish white, subhyaline, with broad diffused grey border. Body black; head and prothorax spotted, tegulæ speckled, with white; collar dull red; abdomen blue-shot, with the last four segments metallic green: wings and body below brownish grey: legs spotted with white. Expanse of wings 1 inch 1 line.

Rio Jutahi; taken February 5, 1875 (J. W. H. Trail).

ANDROCHARTA, Felder.

Androcharta diversipennis. (Plate X. fig. 9.)

Euchromia (Hippola) diversipennis, Walker, Cat. Lep. Het. i. p. 225, n. 34 (1854).

Primaries black-brown; costa and base streaked with scarlet; a small cunciform spot in the cell, a trifid pyriform discal spot, and a small subcostal dot above the latter, hyaline white; two basal dots, and two more at end of cell, metallic green: secondaries snow-white, with brown costal area. Body dark brown; head, collar, tegulæ, and sides of abdomen, spotted with green; base of abdomen spotted in the middle with scarlet, at the sides with sordid white. Primaries below paler than above, basal scarlet streaks and discoidal metallic spots obsolete: secondaries brown, streaked with green at the base; a white submedian spot across the submedian and internal nervures. Body below dark brown, spotted with green on the borders; anterior trochanters almost wholly white; venter with lateral red spots at the base. Expanse of wings 1 inch 10 lines.

Tapajos (Bates).

Androcharta stretchii. (Plate XVIII. fig. 7.)

Androcharta stretchii, Butler, Journ. Linn. Soc., Zool. xii. p. 427. n. 4 (1876).

3. Allied to the preceding species, but larger, with no searlet spots or streaks on the wings or body: the primaries with an oblique white spot below the eell; a greenish-blue streak in the cell, and a large bifid spot at the end of it; the secondaries wholly white above; the primaries below with a large ovate white patch filling the lower half of the disk; the secondaries below with a larger white spot and white fringe. Expanse of wings 1 inch 11 lines.

Peru.

* Possibly due to abrasion.

SCEPSIS, Walker.

Scepsis trifasciata, n. sp. (Plate XVI. fig. 11.)

Primaries pale brown; the veins, base, apex, and external angle black-brown: secondaries hyaline white, with a black outer border, black veins, and a grey costal area. Head and thorax dark brown; abdomen black: head and collar spotted with carmine; prothorax spotted with white; abdomen crossed by three yellow bands: body below pale brown; trochanters and a row of spots on each side of the venter, cream-colour; a white streak below proximal end of femora. Expanse of wings 1 inch 3 lines.

Jurucua, Rio Purus; taken September 26, 1874 (J. W. H. Trail).

EPISCEPSIS, n. gen.

Allied to *Scepsis*: shorter in the primaries; secondaries with two subcostal branches, running close together at their origins; upper discocellular nearly four times the length of lower, strongly inarched; radial as usual dividing the discocellulars; lower discocellular very short and oblique; second and third median branches emitted close together (not from the same point) at the end of the cell; first median emitted normally; body not so long as in *Scepsis*. Type *E. venata*, n. sp.

Episcepsis venata, n. sp. (Plate XVI, fig. 7.)

Wings hyaline, the veins black; primaries brownish, with the apex, base, external angle, margins, and a spot on the discocellulars, dark brown; secondaries hyaline white, with a broad external black border. Body dark brown; from white-spotted; back of head and sides of collar spotted with earmine; abdomen shot with blue, terminal segments above metallic green; collar below white-spotted; legs white below, trochanters of first pair rosered; venter white in the centre, grey-brown at the sides, with a row of small testaceous spots; genitalia yellow. Expanse of wings 1 inch 1 line.

Rio Jutahi, near Rio Curnem; taken January 29, 1875 (J. W. H. Trail).

EUCEREON, Hübner.

Eucereon varium. (Plate IX. fig. 5.)

Euchromia (Eucerecon) varia, Walker, Cat. Lep. Het. i. p. 266, n. 117 (1854).

Primaries black-brown; the veius, two very irregular transverse lines (converging towards inner margin), a lumulated submarginal line, a sigmoidal litura intertwining with the external transverse line, and a basal arched litura, whity brown; a whitish spot within the end of the cell, and another just below the middle of outer margin: secondaries hyaline white, veins and borders black. Body black-brown; collar, a broad transverse band on proximal half of abdomen, and two lateral spots above it, orange; a whitish spot on meta-

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thorax. Primaries below dark brown; two spots in the cell and an arched series beyond it whitish: secondaries as above. Body dark brown; proximal end of troehanters orange. Expanse of wings 1 inch 8 lines.

Pará (Smith).

Eucereon marmoratum, n. sp. (Plate XVI. fig. 4.)

General aspect of *E. setosa*. Primaries whity brown, becoming slightly darker towards apex; veins black-brown; two central dentate-sinuate lines, opposed to each other and diverging towards the costa, partially obscured by a large diffused V-shaped marking across the end of the cell; an interno-median basal streak and a series of discal hastate markings black-brown; two bifid whitish subapical spots, placed obliquely: secondaries hyaline white, with a broad black border. Head and thorax pale brown; frons, antennæ, margins of thorax, collar and tegulæ, and a central line, black-brown; back of head ochreous; metathorax yellowish behind; abdomen black-brown, shot with blue, the sides and three subterminal segments ochreous. Primaries below brown, a spot near the end of the cell and two subapical, as above, white. Body dark brown; pectus with lateral whitish tufts; collar, trochanters, and a large patch at base of venter ochraceous; proximal end of hind femora and distal end of tibiæ white. Expanse of wings 1 inch 8 lines.

"Pupunhazinho," Rio Jurua; taken November 8, 1874 (J. W. H. Trail).

P. marmoratum seems to be a common species. Mr. Trail took it in the following additional localities:—Imla, below the Rapids of Porteira, Rio Trombetas, March 1; Rio Negro, June 14; at Ayrão, July 3; near Aruman, Rio Purus, September 5; Guajara, September 6 and 7; Pedroso, September 25; Mamiva, September 28; Mabidiry, September 30; Mouth of Rio Sapo, October 13; Curimata, Rio Jurua, October 30; Pupunha, November 1 and 5.

Eucereon complicatum, n. sp. (Plate XVI. fig. 12.)

Nearly allied to *E. marmoratum*, but the wings paler, and the central transverse lines of primaries approaching each other at both extremities; nearly the whole of the venter creamy ochreous. Expanse of wings 1 inch 9 lines.

Rio Jurua, October 26, 187 t (J. W. H. Trail).

Eucereon reticulatum, n. sp. (Plate XVII. fig. 9.)

Primaries, head, and thorax dark brown, reticulated with pale greyish brown or, more strictly speaking, pale greyish brown covered with dark brown spots: costal area of primaries pale brown, interrupted at equal distances by blackish spots; outer border pale brown, with a row of submarginal black spots; a white dot in the cell, two beyond it, one on internomedian area, and one (cut by the second median branch) on outer border: secondaries dark brown, outer border blackish: abdomen deep rose-red, anal segment black tipped with white. Wings below dark brown; primaries with a small spot in the cell, a bifid spot beyond it, another on outer margin, the fringe at apical and external angles, white; pectus sordid

whitish; trochanters rose-red, with black outer angle in front; remainder of legs varied with black; venter cream-coloured, all the segments, excepting the last two, rosy behind and spotted with black at the sides; last two segments black with white edging. Expanse of wings 1 inch 4 lines.

Boa Vista, Rio Jutahi; taken February 1, 1875 (J. W. H. Trail).

Eucereon arenosum, n. sp. (Plate XVII. fig. 10.)

Wings sandy brownish; primaries irregularly traversed by series of pale-edged dark brown spots; secondaries with the costa whitish: thorax sandy brown; antennæ dark brown; abdomen rose-red, clothed with whitish hairs at the base; anus blackish, clothed with white hairs; wings below with the markings obsolescent and confused; body sandy; venter with small lateral brown spots. Expanse of wings 1 inch 1 line.

Jamiry, Rio Madeira; taken May 28, 1874 (J. W. H. Trail).

HYALEUCERIA, Butler.

Hyaleuceria erythrotelus. (Plate VII. fig. 13.)

Glaucopis (Pheia) erythrotelus, Walker, Cat. Lep. Het. i. p. 147. n. 11 (1854).

Wings hyaline white, veins black-brown; primaries with the margins and the apical area, almost to the middle, black-brown, enclosing a bifid hyaline white spot; secondaries with a moderately broad black border, dentated on interno-median and internal interspaces. Body dark brown; collar and anus earmine; anterior trochanters cream-colour. Expanse of wings 1 inch 1 line.

Pará (Grahame).

NERITOS, Walker.

Neritos obscurata, n. sp. (Plate XVII. fig. 6.)

Primaries pale purplish brown; the interno-basal area, a large patch surrounding the discocellulars, and two ill-defined patches on the outer margin, sordid testaceous; a brown spot on the discocellulars: secondaries rosy, becoming whitish towards the abdominal margin. Body testaceous. Wings below ochraceous upon the costa and veins; remainder of the wing rosy, shot with lilacine. Expanse of wings 1 inch 4 lines.

Prainha; taken November 14, 1873 (J. W. H. Trail).

ELYSIUS, Walker...

Elysius optimus, n. sp. (Plate XVII. fig. 8.)

Primaries red-brown, covered with yellow scarlet-centred spots; veins earmine: secondaries rosy. Head, collar, and thorax yellow; an annular searlet marking on the vertex of the

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head, two on the collar, and one, clongated, on each tegula; abdomen deep rose-red. Primaries below suffused with rose-red, and faintly shot with lilacine; the markings indistinct excepting towards apex; outer margin narrowly black-brown, undulated: secondaries sub-ochreous, rosy tinted. Body below testaceous; palpi and legs rosy above, banded with black and yellow, below testaceous. Expanse of wings 1 inch 3 lines.

Rio Jurna; taken October 31, 1874 (J. W. H. Trail).

ZATREPHES, Hübner.

Zatrephes trailii, n. sp. (Plate XVII. fig. 7.)

Allied to Z. nitida. Primaries golden ochreous, irrorated with earmine, and with a transverse central zigzag earmine line; an oblique regular dark brown line crossing the wing near the base, and a second, slightly irregular, brownish carmine line just beyond the middle, and bounding (internally) a pearly hyaline irregular quadrifid discal patch edged with earmine; an ill-defined series of carmine-edged lunated silvery spots; a short basal brown litura: secondaries rosy, becoming whitish towards costa and outer margin: thorax ochraceous, sparsely irrorated with earmine. Head and collar densely irrorated with earmine; abdomen rose-red, with ill-defined dorsal testaceous streak. Wings below pale rosy, the transverse lines and irrorations obsolete. Body below sordid white. Expanse of wings 1 inch 7 lines.

Rio Jurua; taken November 12, 1874 (J. IV. II. Trail).

I have named this very beautiful species after its discoverer.

Zatrephes paradisea, n. sp. (Plate XVII. fig. 11.)

Primaries golden, with a glistening silver shot, reticulated with earmine; a central oblique dark brown bar from costa to external angle, bounding (inwardly) a large, externally sinuated, brown-edged, pearly hyaline patch, beyond and above which are several dark brown spots; the veins crossing the hyaline patch yellow, dotted with black; a blackish spot near base of inner margin: secondaries pearly white, becoming rose-red towards abdominal and outer margins. Body golden, shot with silver, and spotted here and there with earmine. Wings and body below silvery white; the front legs and a spot in the centre of primaries (on the edge of the hyaline patch) rose-red. Expanse of wings 1 inch 1 line.

Rio Jutahi; taken February 5, 1875 (J. W. H. Trail).

One of the most beautiful of the Arctiidæ.

PHÆGOPTERA, Herrich-Schäffer.

Phægoptera rhodosoma. (Plate XVIII. fig. 3.)

Phægoptera rhodosoma, Butler, Ann. & Mag. Nat. Hist. ser. 4, vol. xvi. p. 233 (1875).

Primaries pale brown, transversely streaked all over with dark greyish brown: secon-

daries with discoapieal area, from costa to near anal angle, dark brown, subhyaline internally; discoidal cell whitish subhyaline: abdominal area broadly rose-red; top of head, centre of collar, and prothorax, creamy yellow; remainder of thorax brown. Abdomen rose-red, posterior segments transversely banded with black; antennæ dark brown. Wings below sepiabrown, primaries showing the darker transverse streaks indistinctly; secondaries with rosy area as above. Head black; pectus dark brown; coxac rose-red; venter brown, paler at the base. Expanse of wings 2 inches 9 lines.

Eenador (Buckley).

ANAXITA, Walker.

Anaxita sannionis. (Plate XVIII. fig. 6.)

Anaxita sannionis, Butler, Ann. & Mag. Nat. Hist. ser. 4, vol. xii. p. 228. n. 33 (1873).

Primaries above with the basal half ochraceons, varied with crimson; apieal half crimson; the nervures and internervular folds black, the nervures enclosed in black-edged greyish streaks; a band of the same character crossing the basal third of the wing, a second just before the end of the cell, a third from the middle of the median nervure to inner margin; a spot of the same at the base of costal area: secondaries rosy crimson; the apex, outer margin, a triangular patch at anal angle, and the nervures from the median upwards (excepting at base) dark brown. Body crimson; collar and tegulæ golden yellow, brown-edged; abdomen with blackish brown dorsal line; anus and venter blackish, with three yellow spots on each side; legs and antennæ brown. Wings below nearly as above: primaries with the streaks and bands brown; a black costal spot on the first two bands; basal area rosy: secondaries with a yellow subcostal litura. Expanse of wings 3 inches 2 lines.

Huasampilla, Peru (Whitely).

EUCYANE, Hübner.

Encyane diana. (Plate XIX. fig. 6.)

Eucyane diana, Butler, Ann. & Mag. Nat. Hist. ser. 4, vol. xvi. p. 174. n. 4 (1875).

General pattern and coloration of *E. uranicola*. Wings black, with the base metallie bluegreen; apical fringe white: primaries crossed by an oblique white band, cut by the black nervures, and edged internally upon the costal area by a carmine spot: secondaries with a trifid postmedian oblique white streak, united above to a carmine spot; anal fringe white. Body above metallie blue-green: wings below as above: pectus green; legs black-brown, longitudinally striped with white; venter green at the base and margins, blackish at the sides, crimson in the centre, with the hinder edges of the segments white. Expanse of wings 2 inches 3 lines.

Ega (Bates).

HERACLEA, Hübner.

Heraclea commixta, n. sp. (Plate XIX. fig. 1.)

Primaries black-brown; the fringe, an interno-median line from the base, and a post-median oblique litura, pale testaceous: secondaries searlet, with a broad black-brown outer border just enclosing a curved subapical line of searlet. Body black-brown; abdomen mottled with searlet at the sides. Wings below pale red, with broad brown borders; primaries with whitish fringe: body as above. Expanse of wings 1 inch 5 lines.

Guatemala.

I found *H. commixta* in the collection as *Ammalo helops* of Cramer.

HOPLARCTIA, n. gen.

Allied to *Heraclea*, but easily distinguished by its hairy body and metallic coloration, and its long strongly pectinated antennæ. Type *H. nantana*.

Hoplarctia nantana. (Plate XIX. fig. 2.)

Ammalo nantana (sie), Walker, Cat. Lep. Het. Suppl. i. p. 282 (1864).

Primaries chocolate-brown; the inner margin, lower half of external fringe, and a longitudinal streak from the base (through the cell) to near the outer margin, ochreous; a silvery green spot at the base: secondaries earmine, with a very irregular black-brown outer border; fringe, excepting at apex, orange. Body black; head and thorax spotted, and abdomen banded with metallic blue-green. Primaries below brown, with a broad expanding searlet streak from the base to near outer margin; a scarlet litura above submedian nervure: secondaries searlet, irregularly bordered with brown; fringe as above: legs streaked with metallic green. Expanse of wings 1 inch 7 lines.

East Peru (Degand).

It is needless to point out how this species differs from Ammulo helops and allies, inasmuch as there is no resemblance whatever between them.

LITHOSIIDÆ.

JOSIOIDES, Felder.

Josioides sexmaculata, n. sp. (Plate XIX. fig. 4.)

Black-brown: primaries with a large central orange patch; a subapical lunate orange spot: secondaries with a central pyriform orange spot; an orange streak on abdominal margin: abdomen with lateral orange streaks. Primaries below with the orange patch con-

tinued internally to the base; secondaries with a few orange scales at the base; no abdominal streak, the central spot enlarged to twice its size; otherwise as above. Expanse of wings 1 inch 6 lines.

Pará (J. P. G. Smith).

Josioides purpurata, n. sp. (Plate XIX. fig. 5.)

Wings purplish brown; primaries with a broad, oblique, orange band, slightly incurved at its lower extremity: thorax dark brown; abdomen black, shot with purplish blue, with a lateral orange spot: primaries below with the orange band broader; secondaries with a rounded orange spot on the disk; venter dark brown; anus orange. Expanse of wings 1 inch 6 lines.

Barreiras das Araras, Rio Solimões, January 16, 1874 (J. W. H. Trail).

MELAMERIDÆ.

LAMA, Walker.

Lama striata, n. sp. (Plate XIX. fig. 7.)

Black-brown: primaries above with a large cuneiform golden yellow patch at the base, intersected by the black nervures and internervular streaks; a rather narrow oblique band of golden yellow beyond the middle, from the subcostal nervure to near the external angle. Body above slightly bluish; from greyish; genitalia testaceous. Primaries below without the black veins and streaks upon the yellow basal area; band slightly broader: secondaries with an oblique abbreviated yellow band from submedian nervure to end of cell; otherwise as above. Body below silky black; legs greyish in front, brown behind; venter with a lateral interrupted yellow line. Expanse of wings 1 inch 6 lines.

Espiritu Santo. (see note on p. 46).

Allied to Lama trifera of Walker.

GANGAMELA, Walker.

Gangamela figulina, n. sp. (Plate XIX. fig. 8.)

Primaries bright orange; the margins, a large triangular apical patch, and the veins towards the base, black-brown: secondaries black-brown. Body black-brown; head and collar spotted with white; tegulæ with a central squamose orange streak: abdomen with dorsal and lateral longitudinal grey lines; peetus orange in front, white behind; legs with white inner margins to the trochanters and femora; venter white, with central longitudinal black-brown band. Expanse of wings 1 inch 8 lines.

Espiritu Santo.

DIOPTIDE*.

HYRMINA, Walker.

Hyrmina trailii, n. sp. (Plate XIX. fig. 9.)

Resembles Leucothyris astrea and is nearly allied to Hyrmina cyma, from which it chiefly differs in the absence of the subcostal orange spot in primaries and the different form of the subapical hyaline streak. Wings hyaline, black-veined; primaries with the borders black-brown; two oblique brown bands, the first across the middle of the wing, the second (broader) towards apex: secondaries with costa brown; onter margin black-brown, enclosing a well-defined submarginal orange streak. Body brown; abdomen with a dorsal whitish line; venter whitish. Expanse of wings 1 inch 6 lines.

Forest behind Manaos, Amazons, August 26, 1874 (J. W. H. Trail).

I have named this interesting little species after its discoverer.

STENELE, Walker.

Stenele calida, n. sp. (Plate X1X. fig. 3.)

Wings above bright reddish orange: primaries with the external two fifths black-brown; a quadrate spot beyond the end of the cell, and two smaller submarginal spots on the median interspaces bright ochre-yellow: secondaries with a narrow dentate-sinuate black-brown onter border. Body bright reddish orange; head and collar yellow, with central black spots; antennæ black; thorax with a black spot on each shoulder; abdomen with a black lateral line; anus black, with a central greyish spot. Wings below paler; primaries with the apex chocolate-brown, yellow spots larger than above; costa yellow: secondaries with a yellow streak on each interspace and in the cell; a submarginal series of yellow spots; blackish border narrower than above: body below yellow; legs streaked with black. Expanse of wings 2 inches 1 line.

East Peru (Degand).

Nearly allied to Stenele aletis of Felder.

NYCTEMERIDÆ.

PTEROTHYSANUS, Walker.

Pterothysanus laticilia. (Plate XIV. fig. 2.)

Pterothysanus laticilia, Walker, Cat. Lep. Het. ii. p. 401. n. 1 (1854).

Primaries black, irregularly blotched with white; a submarginal series of white spots: secondaries white, crossed before the middle by an irregular black band; a curved dentate-sinuate discal band, and a submarginal series of partially confluent spots, black: thorax black, * The Dioptide, as now restricted, are simply the New-World representatives of the family Nyctemeridae.

EUSCHEMA. 57

spotted with white; head and collar reddish orange; abdomen ochrous, spotted with black, the spots towards the base forming transverse bars. Expanse of wings 2 inches 11 lines. Silhet.

CHALCOSIIDÆ.

EUSCHEMA, Hübner.

Euschema discalis. (Plate XIV. fig. 1.)

Euschema discalis, Walker, Cat. Lep. Het. ii. p. 407. n. 5 (1854).

Primaries purplish black; two longitudinal basal streaks and three irregular macular transverse curved bands white, washed with grey; a cunciform white internal patch: secondaries with the basal half white; a large black spot at the end of the cell; external half purplish black, maculated with yellow: thorax grey, banded with black; abdomen white; anus yellow. Primaries below purplish black, streaked and banded as above, but the markings whiter: secondaries golden yellow, white at the base, with costal and basicostal longitudinal bands, a large spot at the end of the cell, a very irregular discal band, and a series of irregular marginal spots, black. Body below yellowish. Expanse of wings 3 inches 1 line.

Penang.

Euschema subrepleta. (Plate XIV. fig. 4.)

Euschema subrepleta, Walker, Cat. Lep. Het. ii. p. 406. n. 3 (1854).

Primaries with the basal half golden yellow, transversely and longitudinally banded with black; external half purplish black, maculated with two transverse series of subhyaline greyish white spots: secondaries golden yellow, banded and marginally spotted with purplish black. Body golden yellow; thorax banded with black, abdomen with either black or grey. Wings below nearly as above. Body below golden yellow; legs whity brown. Expanse of wings 2 inches 9 lines.

Borneo.

Also common at Malacea. Identical with E. bellonaria, Guénéc.

Euschema flavescens. (Plate XIV. fig. 3.)

Eusehema flavescens, Walker, Cat. Lep. Het. ii. p. 406. n. 4 (1854).

Primaries above subhyaline yellow at the base, with an interno-basal irregular black streak; remainder of the wing black, crossed by two series of subhyaline white spots: secondaries golden yellow; the veins, apex, margin, and two irregular transverse bands black; thorax dark brown; the head behind, the collar, and tegulæ, yellow; abdomen yellow, banded and laterally spotted with dark brown. Expanse of wings 2 inches 11 lines.

North India.

Euschema bellona. (Plate XIV. fig. 5.)

Euschema bellona, Walker, Cat. Lep. Het. ii. p. 405. n. 2 (1854).

Basal half of wings golden yellow, spotted with black; external half purplish black: primaries with two series of semitransparent white discal spots, partially washed with grey. Body above golden yellow; thorax banded and spotted with black; abdomen banded with grevish; below nearly as above. Expanse of wings 3 inches 9 lines.

Moulmein.

OTROEDA, Walker.

Otroeda occidentis. (Plate XIV. fig. 6.)

Otroeda occidentis, Walker, Cat. Lep. Het. ii. p. 403. n. 2 (1854).

Primaries dark brown; the veins at the base, an oblique central band, a shorter tapering band beyond the cell, and a submarginal series of six spots, white: secondaries white; a very broad external black-brown border, edged within towards the abdominal margin with tawny; a submarginal and a marginal series of white spots: thorax brown, longitudinally banded with white; abdomen white; below nearly as above. Expanse of wings 3 inches 9 lines.

Sierra Leone.

Otroeda vesperina. (Plate XIV. fig. 7.)

Otroeda vesperina, Walker, Cat. Lep. Het. ii. p. 403. n. 3 (1854).

Primaries whitish ochreous; a series of radiating basal streaks; two oblique transverse central bands, the apical area, and outer border to near external angle, dark brown; a submarginal series of six white spots: secondaries dull ochreous; a rather broad external black border with submarginal and marginal series of white spots: thorax black, spotted and longitudinally striped with ereamy ochreous; abdomen sordid ochreous, with a dorsal black streak; below nearly as above. Expanse of wings 3 inches 8 lines.

Congo.

URANIIDÆ.

NYCTALEMON, Dalman.

Nyctalemon excavatus. (Plate 1. fig. 1.)

Nyctalemon excavatus, Walker, Cat. Lep. Het. i. p. 9. n. 5 (1854).

Wings dark brown, crossed by numerous transverse, undulating, subparallel lines, and two similarly undulating broad brown bands; a series of submarginal black clongated markings, edged with whitish; secondaries with three large occllated markings, two in the tail and one subanal; anal area rosy ferruginous, becoming whitish externally, and crossed by two submarginal black liture. Expanse of wings 3 inches 2 to 5 lines.

Haiti.

CORONIS. 59

CORONIS, Latreille.

Coronis subpicta. (Plate III. fig. 2.)

Coronis subpicta, Walker, Cat. Lep. Het. i. p. 39. n. 5 (1854).

Wings dark brown, with a central irregular darker transverse band, sharply defined on its outer and diffused on its inner edge: primaries with the costa black-brown, crossed by numerous pale brown litura; remainder of the wing reddish, crossed by dark wavy lines: secondaries with the external half ferruginous, crossed by numerous dark brown irregular lines; its costal half bounded internally by an abbreviated orange band; apex orange; five ocellated submarginal anal spots, two at the base of the tail with white pupils; outer half of tail white, spotted with clay-colour. Body brown. Wings below with the basal half brownish clay-colour, bounded by a central dark brown band, which is followed by a pale band, whitish in primaries, ochreous in secondaries; disk of primaries dark brown, streaked with clay-colour towards the costa; outer border sandy yellowish; fringe brown; a brown spot at the end of the cell: secondaries with the disk dull red, streaked externally with black; outer border paler red; two yellow apical lumules; fringe brown; two black dashes above the tail, which is white externally. Body brownish clay-colour; legs and palpi paler. Expanse of wings 2 inches 10 lines.

Venezuela (Dyson).

Coronis interlineata. (Plate III. fig. 1.)

Coronis interlineata, Walker, Cat. Lep. Het. i. p. 38. n. 4 (1854).

Wings dark brown: primaries crossed by darker undulating lines; veins pale; two broad transverse irregular bands, bounded by double pale lines; an irregularly undulated pale submarginal line, beyond which is a series of waved black lituræ: secondaries with a diffused central dark brown area, bounded externally by an angulated orange band, which tapers, is clouded, and divided by a brown line, from third median branch to abdominal margin; disk streaked with pale brown; a submarginal pale line, ochreous towards apex; three well-marked, black-bordered, chocolate-brown anal submarginal spots. Body greyish brown. Wings below testaceous, crossed by two broad irregular darker bands, and mottled with brown: primaries with the bands dark brown, and a large quadrate brown spot at the end of the cell: secondaries tinted with ochreous; a subbasal transverse brown line. Body below sandy yellowish. Expanse of wings 2 inches 5 lines.

Hab. ——?

LARENTIDÆ.

SCORDYLIA, Guénée.

Scordylia humeraria. (Plate XX. fig. 8.)

Scordylia humeraria, Walker, Cat. Lep. Het. xxiv. p. 1277. n. 8 (1862).

Basal half of wings golden yellow; external half dark chocolate-brown; fringe spotted with whitish: primaries with the base and two costal spots on basal area dark brown; three whitish costal dots near apex; secondaries with the external border interrupted internally by an angulated streak proceeding from the basal ground-colour. Body above greyish, below creamy whitish; legs spotted with blackish. Wings below altogether paler than above; apex of primaries marbled with castaneous and white; secondaries varied with grey, and mottled all over with black. Expanse of wings 1 inch.

Bolivia (Bridges).

Scordylia perfectaria. (Plate XX. fig. 9.)

Scordylia perfectaria, Walker, Cat. Lep. Het. xxiv. p. 1277. n. 9 (1862).

Primaries, basal half orange-yellow, external half dark chocolate-brown; two costal spots on basal area and the base, greyish brown; two or three yellow costal dots near apex; fringe white-dotted: secondaries orange-yellow, with the apical border broadly dark brown; a black submarginal line from the apical border to the anal angle, above which is a short black litura. Body pale greyish brown, below white. Wings below paler; basicostal area of primaries and secondaries sandy whitish, varied with stramineous and red-brown; apices red-brown, clouded with grey and mottled with black; primaries with a costal whitish spot, separated from the basicostal area by a red-brown spot. Expanse of wings 1 inch 1 line.

Mexico (Sallé).

Scordylia salvini. (Plate XX. fig. 10.)

Scordylia salvini, Butler, Ann. & Maq. Nat. Hist. ser. 4, vol. xv. p. 341 (1875).

Wings above suffron-yellow; the apical areas broadly black-brown: primaries with the outer margin black-brown, in continuation with the apical area, irregular internally; three redbrown costal dots on basal area; a small yellow costal spot at centre of apical area; two or three apical whitish dots on the fringe: secondaries with a narrow external black border from apical area to anal angle. Body whity brown: primaries below with the basicostal area whity brown, crossed by black and red-brown lituræ; apex red-brown; the costal spot and an apical diffused patch whity brown; secondaries whity brown, irrorated with red-brown; apical area red-brown, varied with grey and whity brown; otherwise as above. Expanse of wings I inch 4 lines.

Veragua (Salvin).

ERATEINIDÆ.

ERATEINA, Doubleday.

Erateina cometaris. (Plate XX. fig. 6.)

Erateina cometaris, Butler, Ann. & Mag. Nat. Hist. ser. 4, vol. xii. p. 229, n. 35 (1873).

Wings above with basal half greenish cinereous, with bronze reflections; apical half black: primaries with a nearly central abbreviated oblique white band: secondaries with a white oblique line; a red spot near analangle; fringe varied with white. Wings below plumcoloured; nervures of basal area and two oblique central bands, broadest on primaries, silver; an oblique transverse discal golden streak: primaries with the internal area silver; outer central band hyaline in the centre: secondaries with the golden discal streak abbreviated; fringe alternately black and white. Expanse of wings 1 inch 7 lines.

Huasampilla, Peru (Whitely).

Erateina discalis. (Plate XX. fig. 7.)

Erateina discalis, Butler, Ann. & Mag. Nat. Hist. ser. 4, vol. xii. p. 229. n. 36 (1873).

Primaries above black; basal area and a hyaline spot crossing the median branches and end of cell, white; costal and subcostal nervures red: secondaries white; a broad black outer border; fringe varied with white. Body black; thorax clothed with whitish hairs; abdomen white-banded above, white below, with lateral red spots: head white; from and antennæ red; palpi and legs black and white. Primaries below plum-coloured; internal area and central transverse band silvery white; the band with hyaline centre; basal half of costa irrorated with orange; the base and an oblique dash in the cell white: secondaries silvery white; a spot and two dots in the cell, a large patch on inner margin, a marginal border terminating in front in a quadrate subcostal spot, and spots on the fringe at the terminations of the veins reddish plum-colour, speckled with orange. Expanse of wings I inch I line.

Huasampilla, Peru (Whitely).

MARGARODIDÆ.

ERILUSA, Walker.

Erilusa dioptalis. (Plate XX. fig. 1.)

Erilusa dioptalis, Walker, Cat. Lep. Het. Suppl. iv. p. 1376 (1865).

Wings purplish brown, with steel-blue reflections, particularly at the base: primaries with a bifid hyaline spot interrupted by the median nervure, and a postmedian abbreviated oblique hyaline white band: secondaries with a broad central hyaline streak from the base to near the outer margin. Body brown, bluish in parts; below whitish; collar clay-coloured. Expanse of wings 1 inch 6 lines.

Ega (Bates).

Erilusa dioptoides. (Plate XX. fig. 2.)

Erilusa dioptoides, Walker, Cat. Lep. Het. Suppl. iv. p. 1377 (1865).

Wings entirely shot with lilacine: primaries bronze-brown; two spots in the cell, a streak below it, a spot at base of first median interspace, and a subapical band hyaline: secondaries hyaline; veins and an irregular narrow outer border, bronze-brown. Body greyish brown above, whity brown below. Expanse of wings 1 inch 10 lines.

Pará (Grahame).

Erilusa cyanea. (Plate XX. fig. 3.)

Erilusa cyanea, Walker, Cat. Lep. Het. Suppl. iv. p. 1376 (1865).

Primaries dark brown, feebly shot with bluish; a whitish streak at the base and a broad postmedian subhyaline white spot: secondaries hyaline white, shot with bluish lilae; veins and a broad outer border dark brown. Body greyish brown, shot with lilaeine blue; from testaceous; body below testaceous; peetus in front and palpi golden yellow. Expanse of wings 1 inch 6 lines.

Ega (Bates).

Erilusa croceiceps. (Plate XX. fig. 4.)

Erilusa croceiceps, Walker, Cat. Lep. Het. Suppl. iv. p. 1375 (1865).

Wings pearly hyaline; the veins and a broad outer border dark brown: primaries with the costal area, base, and inner margin brown, shot with blue: secondaries with the costa and abdominal area pale brown. Body brown, bluish in front, with the head, anus, legs, and entire ventral surface bright ochre-yellow; tibiæ of front legs with a black terminal spot. Expanse of wings 1 inch 6 lines.

Ega (Bates).

The preceding species of *Erilusa* are figured to show their resemblance to the Zygenide. Mr. Walker says, "This group has much resemblance, and perhaps much affinity, to the Dioptida and to the Lithosiida;" but this idea arose from the fact that Mr. Walker had placed several genera of Pyralites in those families, amongst which was the following.

EROCHA, Walker.

Erocha discreta. (Plate XX. fig. 5.)

Dioptis (Erocha) discreta, Walker, Cat. Lep. Het. ii. p. 319, n. 1 (1854).

Wings dark brown: primaries with a longitudinal black-edged pale brown central streak, terminating in a large rounded clavus, which encloses a reniform brown-speckled white spot: secondaries with a large lilae-shot hyaline white pyriform patch, cut by the black median nervure and its three branches. Body grey; head and thorax blackish; tegulæ edged with whitish; pectus white in the centre. Wings below paler than above. Expanse of wings I inch 8 lines.

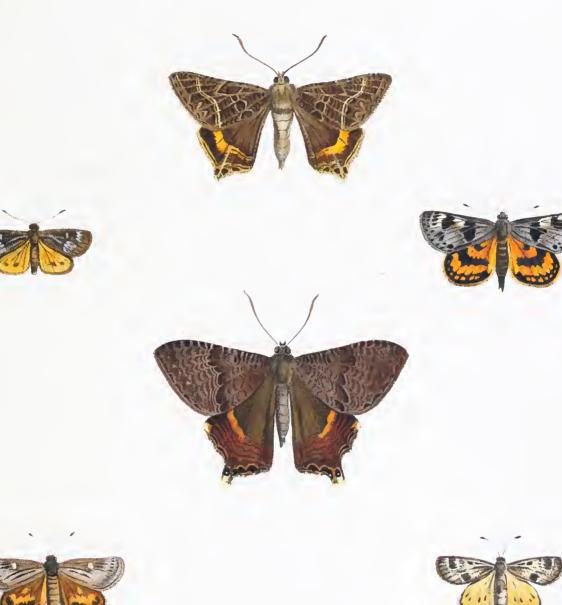
Ega (Bates).





















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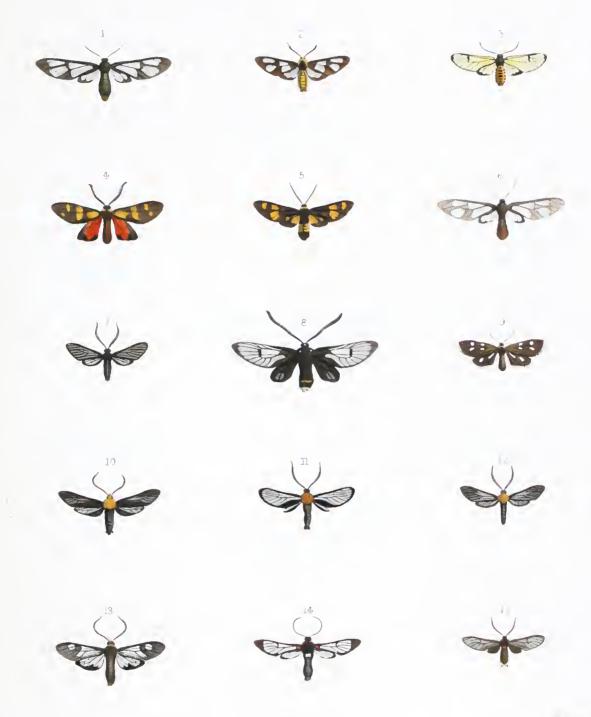
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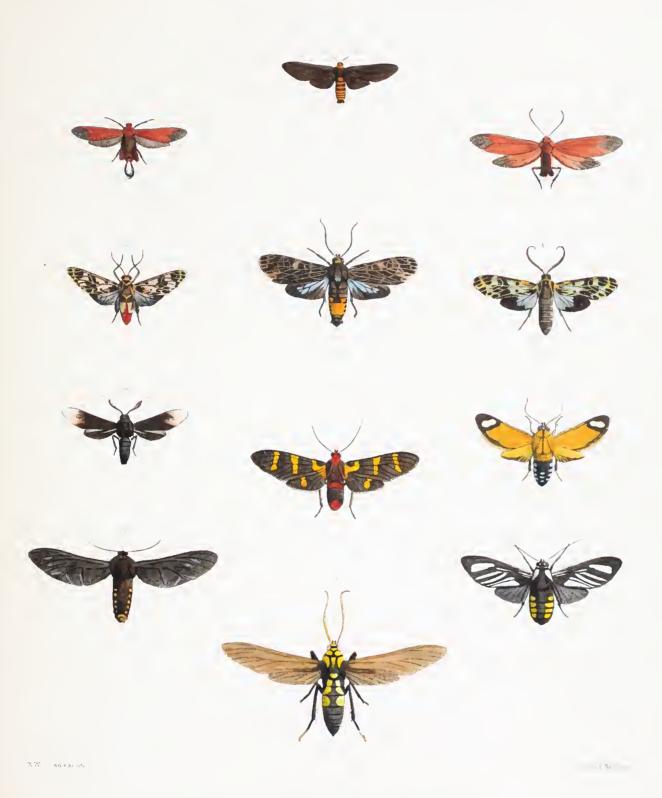
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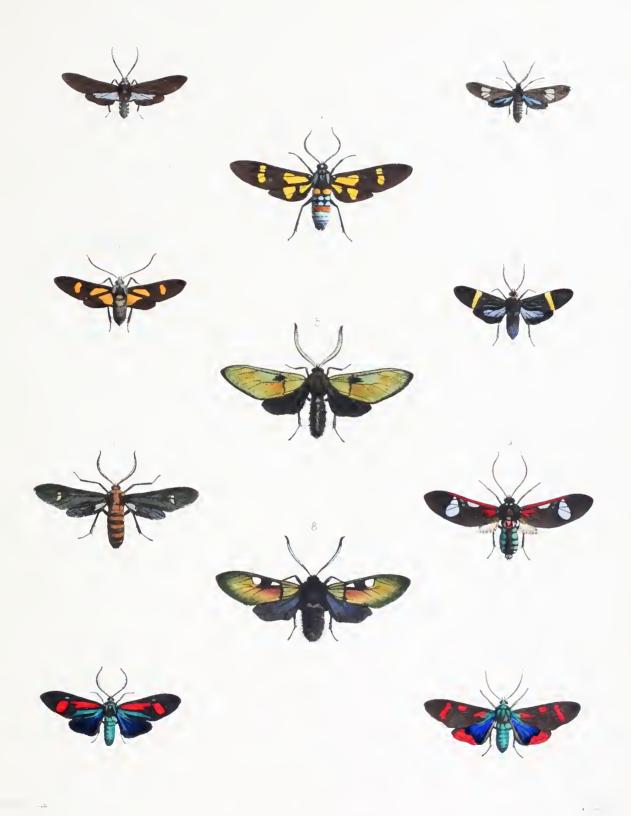
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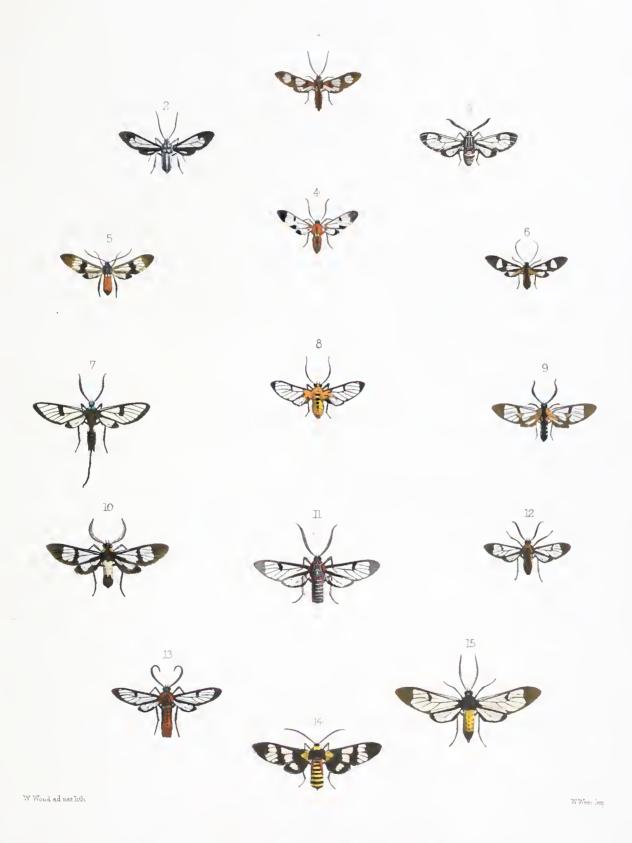




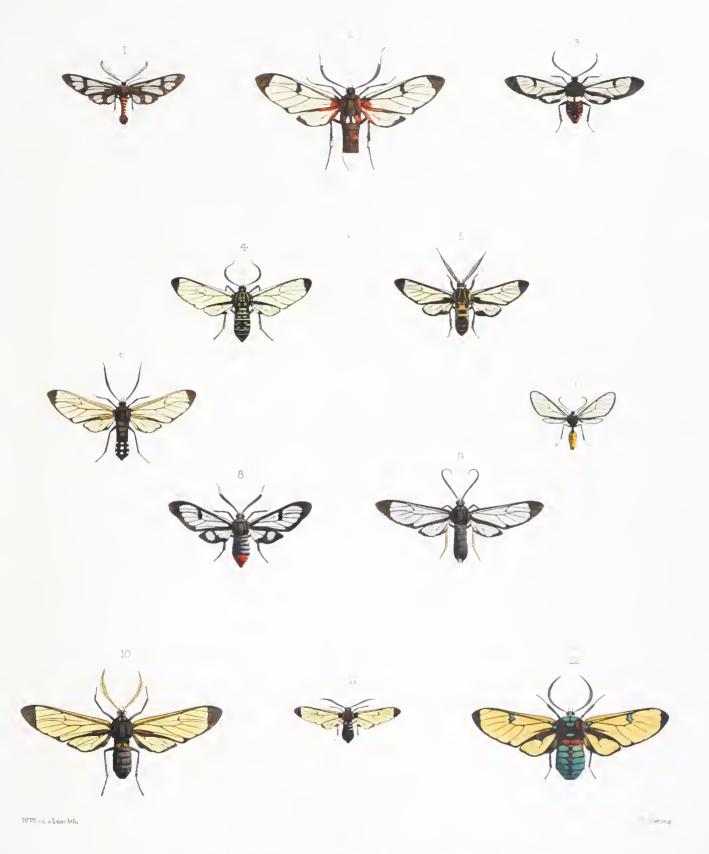


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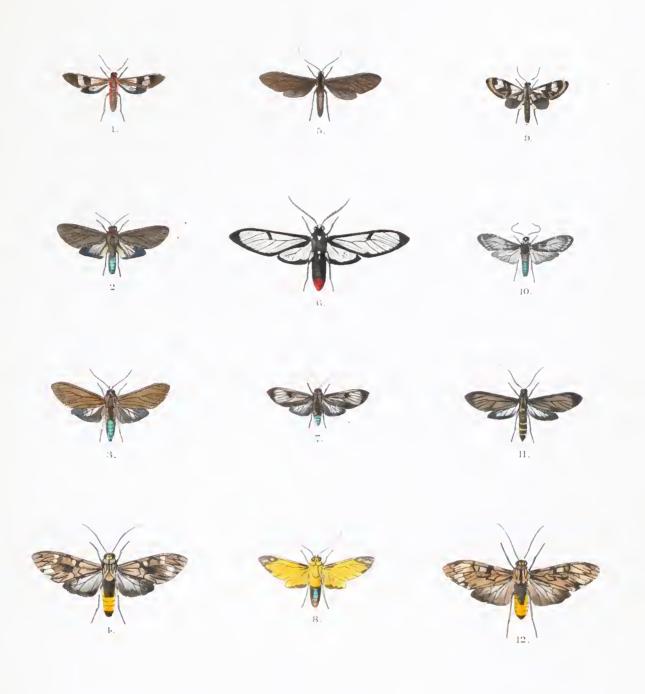




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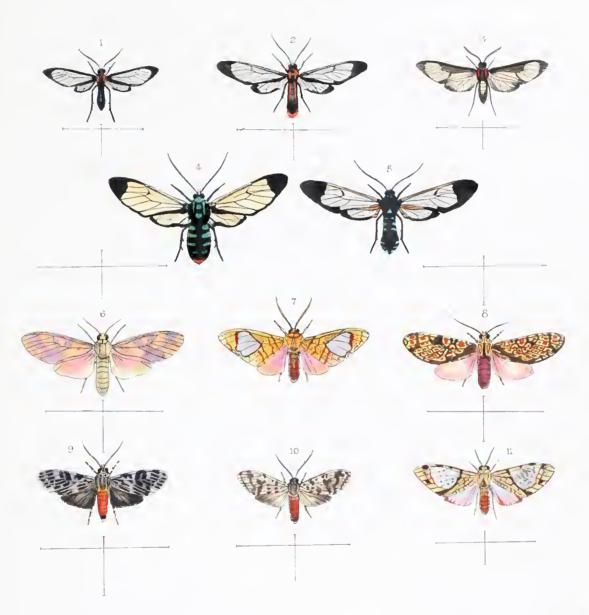
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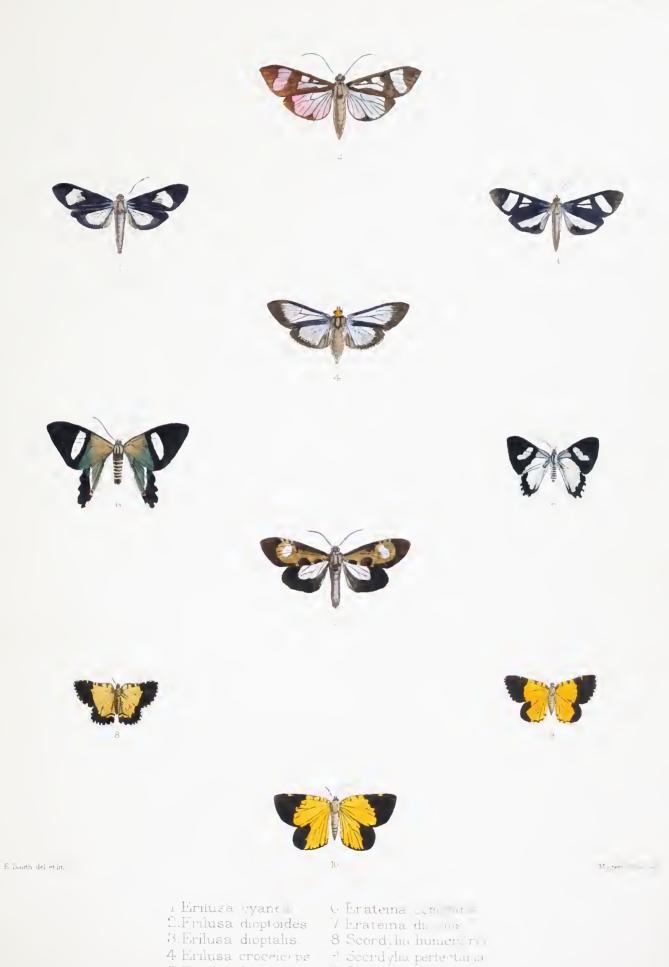
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